

**THE VERMONT STATE HISTORIC
PRESERVATION OFFICE'S**

**GUIDELINES FOR
CONDUCTING ARCHEOLOGY
IN VERMONT**

WORKING DRAFT

July 2002

Acknowledgements

These Guidelines were developed by State Archeologist Giovanna Peebles under the direction of State Historic Preservation Officer Emily Wadhams. An advisory committee to the VTSHPO, consisting of Vermont government and academic archeologists, discussed many ideas and topics and developed a preliminary list of priority research questions important to understanding the precontact and post-contact history of Vermont. Dr. Peter Thomas, formerly with the University of Vermont's Consulting Archaeology Program, now with the Federal Emergency Management Agency, developed the site evaluation matrix in Section **4.4.1**. The members of the Vermont Advisory Council on Historic Preservation provided insightful comments and lively discussion of an early draft. SHPO archeologists in other states, in particular Scott Anfinson of Minnesota, shared their experience and their own state guidelines for archeology.

The Division sincerely thanks the following for their significant contributions to the Guidelines, as well as their sustained help and thoughtful guidance throughout this process: Sheila Charles, John Crock, Scott Dillon, Prudence Doherty, Eric Gilbertson, David Lacy, Jim Petersen, Jeannine Russell-Pinkham, David Skinas, Peter Thomas, and Duncan Wilkie. SHPO Emily Wadhams, State Architectural Historian Nancy Boone, and Department Commissioner Greg Brown contributed important organizational and editorial assistance throughout various drafts.

TABLE OF CONTENTS

- 1.0. Introduction
 - 1.1. Relevant Statutory Authorities
- 2.0. Criteria for Qualified Professional Archeologists
- 3.0. Establishing Archeological Sensitivity
 - 3.1. Archeological Resource Assessment (ARA)
 - 3.1.1. Predictive models for precontact settlement sites
 - 3.1.2. Background research
 - 3.1.3. Field inspection or site visit
 - 3.1.3.1. Map documentation
 - 3.1.4. ARA summary Letter
 - 3.1.4.1. Visible, potentially significant archeological sites in the project area
 - 3.2. Area of Potential Effects (APE)
- 4.0. Evaluating Site Significance
 - 4.1. National Register Criteria
 - 4.2. Historic Contexts
 - 4.3. Integrity
 - 4.4. Establishing Precontact Site Significance
 - 4.4.1. Site must contain multiple categories of data
 - 4.4.2. Site must be able to answer specific, detailed questions important to understanding Vermont precontact and contact period history
 - 4.5. Establishing Historic Period Site Significance
 - 4.5.1. What does the VTSHPO consider a “site” in the context of historic period archeology?
 - 4.5.2. Priority research topics to help evaluate significance of historic period sites
 - 4.5.3. Identifying important research questions and necessary data sets
 - 4.5.4. Quality of site evidence
 - 4.5.5. Summary of information needed by VTSHPO to determine if site assessment process should continue
- 5.0. Standard Archeological Practices and Some Definitions
 - 5.1. Field Methods
 - 5.1.1. Surface survey
 - 5.1.1.2. Ground sensing methods for historic period sites
 - 5.1.1.3. Ground sensing methods for precontact sites
 - 5.1.2. Sub-surface testing
 - 5.1.2.1. Shovel test pit methodology
 - 5.1.2.2. Test units

- 5.1.2.3. Deep testing
- 5.1.3. Recording measurements
- 5.1.4. Establishing a permanent site datum
- 5.1.5. Isolated finds
 - 5.1.5.1. Treating isolated, or limited, surface artifacts
 - 5.1.5.2. Treating isolated, or limited, sub-surface artifacts
- 5.2. Defining Previous “Significant” Ground Disturbance
- 5.3. Winter Limitations
- 5.4. Permits for Archeological Investigations on State Lands, State Landmarks, or Under State Waters
- 5.5. Considering Standing Structures in the Project Area
- 5.6. “Precontact” and “Prehistoric”
- 5.7. Protection of Sensitive Archeological Site Locational Information
- 5.8. Defining Site Boundaries

6.0. Involving the Public

7.0. Archeological Field Investigations

- 7.1. Research Design: All Phases
 - 7.1.1. Standards for preparing research designs: all phases
- 7.2. Scopes of Work: All Phases
 - 7.2.1. Preparing a scope of work
 - 7.2.2. VTSHPO review of scopes of work
 - 7.2.3. Collections care and management issues in scopes of work
- 7.3. Phase I Investigation: Identification Study
 - 7.3.1. Performing identification
 - 7.3.1.1. Research design requirements for Phase I
 - 7.3.1.2. Conducting background research
 - 7.3.1.3. Consulting the community and knowledgeable individuals
 - 7.3.1.4. Phase I field investigations
 - 7.3.1.5. Data analyses
 - 7.3.2. Reporting identification results
 - 7.3.2.1. Phase I “End of Field” letter
 - 7.3.2.2. Short report format
 - 7.3.2.3. Phase I investigation report
 - 7.3.3. Public education and outreach
 - 7.3.4. Collections care and management
- 7.4. Phase IA Investigation: Reconnaissance Study
- 7.5. Phase II Investigation: Evaluation Study
 - 7.5.1. Public education and outreach
 - 7.5.2. Collections care and management
 - 7.5.3. Research design requirements for Phase II
 - 7.5.4. Background research

- 7.5.5. Historic contexts
- 7.5.6. Field investigations and data analyses
- 7.5.7. Documenting results
 - 7.5.7.1. Special considerations for Phase II End of Field letter
 - 7.5.7.2. Phase II investigation report
- 7.5.8. National Register nominations
- 7.5.9. Long term site preservation through easements or fee simple purchase
- 7.5.10. Site monitoring
- 7.6. Phase III Investigation: Data Recovery Study
 - 7.6.1. Public education and outreach
 - 7.6.2. Collections care and management
 - 7.6.3. Research design requirements for Phase III
 - 7.6.4. Phase III scope of work
 - 7.6.5. Documenting results
 - 7.6.5.1. Special considerations for Phase III End of Field letter
 - 7.6.5.2. Quarterly reports
 - 7.6.5.3. Phase III investigation reports
 - 7.6.5.3.1. Standards for Phase III reports
 - 7.6.5.3.2. Special considerations for Phase III reports
 - 7.7. Long term site preservation through easements or fee simple purchase
 - 7.8. Site monitoring
- 8.0. Additional Documentation
 - 8.1. Report Database Form
 - 8.2. Vermont Archeological Inventory Form
 - 8.2.1. Completing Vermont Archeological Inventory forms
 - 8.2.2. Naming potentially significant sites
- 9.0. Public Education and Outreach
 - 9.1. Standards for Public Education and Outreach
 - 9.2. Education and Outreach for Landowners
 - 9.3. Education and Outreach for the Town
 - 9.4. Recommended Projects and Programs
- 10.0. Care and Management of Collections
 - 10.1. If a Site is Located on Private Land
 - 10.2. If a Site is Located on Public Land
 - 10.3. Standards for Care and Management of Collections
 - 10.4. Costs of Care and Management of Collections
- 11.0. Accidental Discovery of Archeological Sites After Project Review and/or During Project Construction
- 12.0. Treatment of Human Remains

13.0. Capping Sites with Fill

APPENDICES

- A. Relevant Federal and State Laws, Regulations, Rules, and Guidelines
- B. Procedures and Criteria for Listing on the State of Vermont's Archeological Consultant's List
- C. Environmental Predictive Model for Locating Precontact Settlement Sites (revised 4/01 and 5/02)
- D. Vermont Division for Historic Preservation Resource Center: Selected List of Available Information
- E. Sources of Historic Context Information
- F. Application and Instructions for Field Investigation Permits under 22 VSA 14
- G. Advisory Council on Historic Preservation *Recommended Approach for Consultation on Recovery of Significant Information from Archeological Sites*
<http://www.achp.gov/archguide.html>
- H. Detailed Supplementary Guidance for Phase I Investigations
 - 1. Phase I research design checklist
 - 2. Supplementary guidance for background research
 - 3. Detailed guidance for completing the End of Field letter
 - 4. Detailed guidance for short report format
 - 5. Detailed guidance for Phase I investigation reports
 - 6. Detailed guidance for Phase II investigation reports
- I. Vermont Archeological Inventory Form (2002 form)
- J. Historic Map Reference Information on the Web
- K. DHP Report Database Documentation Form and Instructions for Use
- L. Advisory Council on Historic Preservation Policy Statements on *Treatment of Human Remains and Grave Goods* (1988)
- M. Sample Letter of Transfer and Deed of Gift.

1.0. INTRODUCTION

People have lived in Vermont for over 12,000 years. The vast majority of that history is unwritten and becomes known only through the archeological record. Most often, archeological investigations in Vermont occur in response to federal and state laws that protect archeological resources. The Vermont Division for Historic Preservation, serving as the Vermont State Historic Preservation Office (VTSHPO), developed these Guidelines to provide a framework for those activities, as well as guidance for non-regulatory archeological studies. These Guidelines replace the ones established in 1989. Since that date, more than a decade of archeological studies throughout the state has provided an important perspective for refining and improving the current practice of archeology in Vermont.

The Guidelines reflect various goals for Vermont archeology:

- Ensure that archeological studies meet high professional research standards.
- Identify important archeological sites that contribute to our understanding of Vermont's precontact and post contact history.
- Protect important archeological sites or, when appropriate, gain information.
- Provide significant public benefits.
- Develop sound and reasoned public policy on regulatory archeology.
- Keep archeological studies as cost effective as possible.
- Increase creativity and flexibility in the conduct of archeological studies.

Archeology in Vermont must result in significant public benefits. As the stories of Vermont's prehistory and history unfold through archeological studies, we must share them widely. The revised Guidelines emphasize public education and communication with clients, landowners, local governments, community members, and interested constituencies. The Guidelines also stress the need for clear and improved communication about archeological expectations, methods, findings, and their value and relevance.

The VTSHPO seeks reasonable approaches to conducting regulatory archeology in Vermont. These Guidelines are meant to allow for flexibility to ensure that the scope and cost of recommended archeological actions are commensurate with a project's scale, level of anticipated impacts, the project area's characteristics, and the significance of sites that may be effected by the project. Archeologists are encouraged to suggest alternative approaches to the VTSHPO, whenever appropriate.

The Guidelines emphasize the importance of prioritizing archeological investigations in an effort to focus on the discovery and consideration of significant archeological sites. The Guidelines also emphasize the importance of evaluating the significance of a site as early as possible in the archeological assessment process.

These Guidelines provide technical guidance for archeological professionals, federal and state agencies, private developers, researchers, and anyone else involved in Vermont archeology. We recommend that they be followed by all archeologists working within the regulatory review process in Vermont, with the exceptions noted below, to ensure that the State's goals for Vermont archeology are met and to help ensure appropriate compliance with federal and state laws.

The VTSHPO is involved in two major categories of project reviews:

1. Reviews in accordance with federal laws, primarily under Section 106 of the *National Historic Preservation Act*, referred to as "Section 106," and sometimes under Section 110 of the *Act*. Under Section 106, federally funded, licensed, permitted, and assisted projects are subject to review.
2. Reviews under state laws, primarily under Title 10 of *Vermont Statutes Annotated*, Chapter 151, known as *Act 250*, and under Title 22 of *Vermont Statutes Annotated*, Chapter 14, referred to as 22 VSA 14, but other statutes as well.

In complying with Section 106 and Section 110, some federal agencies may have different requirements and procedures based on the nature of their programs and statutory authorities. Sometimes, alternative practices and requirements to these Guidelines are established in Programmatic Agreements in accordance with either Section 106 or 22 VSA 14 (current examples include the USDA Natural Resources Conservation Service, USDA United States Forest Service, Federal Emergency Management Agency, Vermont Agency of Transportation, and individual departments in the Vermont Agency of Natural Resources). Various portions of these Guidelines remain applicable to the conduct of archeological assessments under any Programmatic Agreement. In particular, Section **4.0.** relating to "*Evaluating Site Significance*" is intended to guide federal agencies doing archeological project reviews in Vermont.

Archeological investigations on federal and state lands have additional requirements that supplement these Guidelines, for example, permit provisions, that are established in statute (specifically the federal *Archeological Resources Protection Act* and Vermont's 22 VSA 14). The VTSHPO as well as federal and state land managers will advise consulting archeologists when additional or different provisions apply on public lands or to Programmatic Agreements.

These Guidelines incorporate the *Secretary of the Interior's Standards and Guidelines for Identification, Evaluation, and Archeological Documentation*. Professionals must ensure that all archeological studies meet the relevant *Secretary of the Interior's Standards and Guidelines* (available at http://www.cr.nps.gov/local-law/arch_stnds_0.htm).

1.1. RELEVANT STATUTORY AUTHORITIES

There are a number of state and federal laws that require identification, consideration, and possible protection of archeological sites. Archeological studies in Vermont will generally result from compliance with one or more of the following laws, regulations, and rules. Other federal and state laws and regulations may occasionally be involved in an undertaking requiring an archeological investigation. See relevant web sites for full citations and texts in **Appendix A**.

Some examples of relevant statutes, rules, and regulations include:

- 1 VSA Chapter 5, Section 317 (20) (exempts archeological site locations from the “right-to-know” law).
- 10 VSA Chapter 151 (*Act 250*).
- 13 VSA Chapter 81, Sections 3761, 3764, and 3765 (protect burial sites).
- 18 VSA Chapter 107, Sections 5201 and 5212 (protect burial sites).
- 22 VSA Chapter 14 (*Vermont Historic Preservation Act*).
- 30 VSA Chapter 5, Section 248 (Public Service Board’s *Certificate of Public Good*).
- *Vermont Historic Preservation Act Rules* (Rules 1,2,3,4,9,10).
- *National Historic Preservation Act* (Sections 106 and 110)
- 36 CFR 800 (Advisory Council’s regulations implementing Section 106).
- *National Environmental Policy Act*.

2.0. CRITERIA FOR QUALIFIED PROFESSIONAL ARCHEOLOGISTS

Any archeological investigation in Vermont should be conducted by qualified archeological professionals who meet the *Secretary of the Interior's Professional Qualification Standards (Standards)*. Archeological investigations conducted pursuant to federal and state laws must be conducted by qualified professionals. For additional information on the *Standards*, see <http://www2.cr.nps.gov/laws/ProfQual83.htm>.

As a courtesy to agencies, developers, communities, and other users, the VTSHPO maintains a *List of Archeological Consultants*. The qualified professionals on this list meet the *Secretary of the Interior's Professional Qualification Standards* and have demonstrated ability to meet the *Secretary of the Interior's Standards and Guidelines for Identification, Evaluation, and Archeological Documentation* (see http://www.cr.nps.gov/local-law/arch_stnds_0.htm). There may be other qualified consultants with whom the Division has not had contact that do not appear on this list. The VTSHPO has established procedures for listing organizations or individuals on the consultant's list (see **Appendix B**). Qualified professionals do not need to be on the list to conduct investigations in Vermont although the VTSHPO encourages its use.

Placement on the archeological consultants' list does not imply that the VTSHPO certifies personal or corporate qualifications nor that the VTSHPO recommends or endorses these individuals or organizations. Work by individuals or organizations appearing on this list does not receive any special consideration by the VTSHPO.

The VTSHPO considers a thorough knowledge of the Vermont and regional precontact and historic period archeological, historic, and ethnographic literature a key requirement for performing good archeology in this state. Thus, for example, understanding the Paleo-Indian period in Vermont is impossible without knowing the Paleo-Indian literature for northern New England, specifically that of New Hampshire and Maine. Knowing the environmental contexts of the Israel River and Vail sites are necessary as basis for understanding where Vermont's important and earliest Paleo-Indian sites may be found as well as for anticipating their structural and data characteristics.

3.0. ESTABLISHING ARCHEOLOGICAL SENSITIVITY

3.1. ARCHEOLOGICAL RESOURCE ASSESSMENT (ARA)

The archeological sensitivity of a project area is established through application of the VTSHPO's predictive model and some combination of background research, site visit, and consultation with knowledgeable individuals and organizations. Altogether, the process is known as an Archeological Resources Assessment (ARA). This process is flexible: not all components will be necessary in every instance. Sometimes an area identified as sensitive through the predictive model can be avoided without the need for a full ARA.

The guidance below should reflect the scope and needs of the project. It should not be treated as a "checklist" that is automatically followed on every ARA. In particular, the extent of background research should reflect project scale and scope, potential impacts to significant resources, project cost, characteristics of the project area, types of resources expected or known to exist on the property, and other project factors. The site visit is sometimes the most important step for small projects with anticipated modest impacts.

ARA goals:

- Identify areas of archeological sensitivity.
 - Archeological sensitivity considers the project area's potential to contain:
 - **Significant precontact Native American sites** based on the environmental predictive model, background research, and other available information.
 - **Significant historic period archeological sites** (on land or underwater) based on background research, community knowledge, landscape features, or other empirical observations.
- Identify any visible archeological sites or other indicators of the presence or absence of sites.
- Identify and document extent of prior significant disturbance.
- Research, to the extent needed, **relevant** precontact and/or postcontact history or contexts only as they may relate to expected (or visible) significant sites in the project area.
- Identify potential archeological issues that must be considered during project planning.
- Produce a detailed, annotated map(s) that documents the above areas (and sites, if any are visible).
- Complete a summary Letter Report.

"Significant site" means a site that meets the criteria for inclusion in the State or National Registers and applies the considerations in Section **4.0**.

In urban contexts or in floodplain environments, the ARA may involve mechanical deep testing to gather needed information.

3.1.1. PREDICTIVE MODELS FOR PRE-CONTACT SETTLEMENT SITES

The VTSHPO uses one, broad predictive model approved by the Vermont Advisory Council on Historic Preservation (Council) on May 23, 2002. The VTSHPO's predictive model is intended to identify areas with a high potential for containing significant precontact Native American residential sites. The model may offer some guidance in locating Euro-american early settlement sites and some types of historic period Native American sites since these types of sites had similar environmental requirements to precontact settlement. The locations of individual Native American burials, cemeteries, and special use areas during any time period are not readily predictable and the model is unlikely to help in their identification.

The predictive model is an initial desk review tool; it is only a coarse filter that may highlight potential site areas. A project area that indicates a high potential for containing a significant site on the predictive model may trigger a site visit. The site visit results in a recommendation for further archeological investigation, or, results in a "sign off."

The VTSHPO applies the predictive model during desk review of development projects subject to state laws, although developers and state agencies may choose to hire archeological consultants to apply the predictive model which will then be reviewed by the VTSHPO. The VTSHPO usually conducts site visits triggered by the predictive model for Act 250 and state reviews.

Typically, federal agencies (or their delegates) responsible for funding, licensing, or permitting a project hire a qualified archeological consultant to apply the predictive model as part of Section 106 compliance at the beginning of their project assessment. Archeological consultants conduct site visits after applying the predictive model.

The Council must review and approve all predictive models used in the regulatory review process in accordance with the Vermont Historic Preservation Act Rule 2. Specific models may be developed for large scale projects, individual watersheds, or other large units of study. (See **Appendix C: Environmental Predictive Model for Locating Precontact Archeological Sites.**)

3.1.2. BACKGROUND RESEARCH

Background research is increasingly important at the ARA step to establish the potential significance of a site (an expected site or visible site) as early as possible in the archeological assessment process. Background research establishes what types of potentially significant sites exist in the project area and the likelihood (or not) of such sites existing in this locale; helps define the character of such sites; and provides the justification for their potential significance. Thorough knowledge of local, watershed, Vermont, and regional archeological, historical, and ethnographic literature is fundamental to efficient and appropriate background research on individual projects.

The extent of background research, or whether any is even needed, must be evaluated on the basis of the project area's potential archeological sensitivity, project location, project scope, scale of impacts, and other factors.

Background research may be done before or after applying the predictive model. Review of relevant information may include, for example, historic maps, Vermont Archeological Inventory, relevant past archeological study reports, Vermont Historic Sites and Structures Survey, National Register files, relevant historic contexts, and other publications, documents, records, and files. Some of this information is available at the VTSHPO Resource Center (see **Appendix D** for listing of information available at the VTSHPO Resource Center). Oral history can also be an important source of information. Interviews with knowledgeable local individuals, landowners, and Native Americans may be appropriate.

3.1.3. FIELD INSPECTION OR SITE VISIT

A field inspection or site visit, if triggered by the predictive model, should confirm that some, all, or none, of the project area has a high potential for containing a significant site. The site visit identifies highly disturbed, exceedingly wet, or steep areas; clarifies whether or not archeologically sensitive areas lie within areas of potential impact; and recommends ways for avoiding sensitive areas.

A site visit begins with a complete walkover of the project area to assess landforms and major or minor environmental features (for example, level land, relict watercourses, slope, rock outcrops, springs, etc.) that may have influenced land use. If the project is underwater, an appropriate visual investigation may also be necessary.

The archeologist may put in a limited number of soil cores to confirm disturbance or soil integrity and to determine presence of buried intact soil layers. (**Note:** no soil coring should be carried out if it is likely to disturb burial sites.) Past disturbance that may have seriously affected the preservation of significant archeological sites must be sufficiently documented to allow for verification. Documentation of disturbance can include photographs, maps, representative core samples, and/or construction records.

If the project's area of potential effects contains a visible historic period archeological site or historic feature, additional information should be provided (see below). If a visible site is observed, obtain a Vermont Archeological Inventory (VAI) site number from the VTSHPO. Vermont State Plane Coordinates NAD 27 must be provided for each archeological site.

3.1.3.1. MAP DOCUMENTATION

A site plan(s), if available, should be used as the base documentation map to document the result of the field inspection. If not available, the archeological consultant should use the best, scaled project map available in conjunction with a hand drawn sketch or other appropriate format. The map(s) should be keyed and hand annotated to identify sensitive areas, disturbed areas, newly recorded sites, or previously documented sites (identified by site number), relevant landscape or cultural features, and any other relevant information that can assist the client and reviewers in their respective planning, design, and review tasks.

Additional documentation may include past site plans showing previous construction zones and areas of previous disturbance. All maps should be dated. As appropriate, relevant information should be recorded with GPS. Clients may request map information in different formats such as CAD or GIS.

3.1.4. ARA SUMMARY LETTER

An ARA results in a Letter that summarizes its findings and recommendations. The ARA Letter should generally include the information below. If the ARA concludes that the project area has no, or low, potential for containing significant archeological sites, the Letter should address only the relevant items on this list.

The VTSHPO Report Documentation database form shall be completed and submitted electronically upon completion of the ARA Letter.
(see **Appendix K**).

- a. Project name, town, county, **specific** legal jurisdiction (Act 250, Section 106, 22 V.S.A. 14, 30 V.S.A. 5, Section 248, or a combination of several). Identify the document as an “***ARA Letter***.”
- b. Project description as known at the time of writing, including date of plans used, if any, in the course of the ARA; and a description of the Area of Potential Effect APE).
- c. Scoring on the VTSHPO’s predictive model.
- d. Copy of topographic map with project area and APE delineated.
- e. Annotated map(s) as described in Section **3.1.3.1**.
- f. Brief description of site visit methods and type of ground cover, vegetation, and other land use that influenced or affected observations.
- g. Brief description of areas that are significantly disturbed and need no further consideration.
- h. Detailed information for any visible historic period archeological sites or features or visible evidence of precontact sites (**see Section 3.1.4.1.**)
- i. Statement and supporting information for why the project area is **not** likely to contain significant sites.
- j. Brief description of the confirmed archeological sensitivity of the project area and expected significant site types.
- k. Summary of background research describing types of significant sites that may exist in the project area and supporting the likelihood, or not, of identifying significant sites (see Section **4.0.**)
- l. If the APE contains, or is likely to contain, a historic period site, to the extent possible, provide a statement of preliminary site significance or lack of it by addressing the VTSHPO information requirements outlined in Section **4.5.5.** and using the guidance provided in Section **4.5.**
- m. Recommendations, including a description of potential archeological issues that need to be considered during project planning (this section may include conditions for avoiding and preserving the sensitive areas during and after construction; additional background research; Phase I archeological investigation; erecting fencing during construction; etc.; or a combination of recommendations).

- n. Predictive model checklist.
- o. Soil core profiles, if useful in documenting conclusions and recommendations.

3.1.4.1. VISIBLE, POTENTIALLY SIGNIFICANT ARCHEOLOGICAL SITES IN THE PROJECT AREA

Additional information should be submitted if archeological resources are observed during the ARA (often historic archeological sites):

- More specific map of the site or feature in relation to potential project impact.
- More detailed description.
- Brief discussion about the site or feature's potential significance or lack of it using the tools in Section **4.0**.
- VAI site number and completed VAI site form, if appropriate (see Section **8.2**).
- Optional photographs if useful to explain text.

3.2. AREA OF POTENTIAL EFFECTS (APE)

The VTSHPO uses the federal definition of "Area of Potential Effects" (APE) to describe the maximum area that may be affected by a project. Both direct and indirect effects to archeological sites must be considered when determining the APE.

A few examples of project related impacts in an APE beyond the actual construction limits of the project include:

- Borrow areas and other sources of fill material.
- Disposal sites or waste areas.
- New or upgraded access or haul roads.
- Staging, storage, and stockpile areas.
- Drainage diversions.

Federal definition of the APE:

"The geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking." [36 CFR 800.16(d)].

4.0. EVALUATING SITE SIGNIFICANCE

4.1. NATIONAL REGISTER CRITERIA

Archeological investigations conducted under federal and regulatory requirements seek to identify “significant” archeological sites. A significant site meets the criteria for inclusion in the State or National Registers of Historic Places. Both registers use the National Register criteria for evaluating significance. The National Register criteria are:

Criterion A: Sites that are associated with events that have made a significant contribution to the broad patterns of our history.

Criterion B: Sites that are associated with the lives of persons significant in our past.

Criterion C: Sites that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Criterion D: Sites that have yielded, or may be likely to yield, information important in prehistory or history

Page 21 of the Bulletin *How to Apply the National Register Criteria for Evaluation* sets out two requirements for Criterion D of the National Register that are especially relevant to the Guidelines:

1. The site must have, or have had, information to contribute to our understanding of human history or prehistory, and
2. The information must be considered important.

The United States Department of the Interior’s National Register program has published several Bulletins as tools to help guide archeologists, agencies, managers, and others in evaluating archeological site significance:

- *How to Apply the National Register Criteria for Evaluation*
- *National Register Guidelines for Evaluating and Registering Archeological Properties (2000)*
- *National Register Guidelines for Evaluating and Registering Historic Archeological Sites and Districts (1993)*
- *National Register Guidelines for Identifying, Evaluating and Registering Historic Mining (1992)*
- *National Register Guidelines for Nominating Historic Vessels and Shipwrecks to the National Register of Historic Places (no date)*
- *National Register Guidelines for Evaluating and Documenting Traditional Cultural Properties (rev. 1998)*

These Bulletins and others can be downloaded from the National Park Service web site at <http://www.cr.nps.gov/NR/publications/>.

Assessing site significance is often a cumulative process in which more and more data are collected to reach the point where significance can be established. Although that point can sometimes only be reached after Phase II investigation, at other times significance can be established sooner, perhaps after the ARA. This section of the Guidelines provides guidance in how to assess site significance and how to assess it as soon as possible. Thus, sites that are not likely to yield important information are eliminated from consideration early.

4.2. HISTORIC CONTEXTS

Historic contexts provide a necessary framework for discovering, investigating, evaluating, and managing all kinds of archeological sites. They are a cornerstone of the *Secretary of the Interior's Standards and Guidelines* by:

- Providing the framework for the current state of knowledge about a type of resource or related categories of resources.
- Providing the basis for understanding expected site types, their location, age, size, and their expected data classes within a given geographic area.
- Providing the basis for evaluating the relative significance of sites of the same or similar type.
- Describing the relationship of individual historic resources to other similar resources or to related resources.
- Telling the unifying story about a category of resources.

“Keeping Vermont A Special World: The Vermont Historic Preservation Plan” (1997) presents a very general overview on the topic of historic contexts and associated property types. *“Vermont’s Prehistoric Cultural Heritage”* (1991) and *“Vermont’s Historic Contexts”* (1989) serve as the current, basic historic contexts that should be used in evaluating significance.

A site is not necessarily significant just because it fits into and can be described within an historic context. The site still must also meet the considerations described below. In addition to the above documents, the VTSHPO’s historic context files and the State Archeologist’s subject files may contain supplemental context information.

The VTSHPO seeks to accelerate the development of detailed historic contexts, property type descriptions, and registration requirements to assist in site identification and evaluation. National Register “registration” requirements, in particular, will expedite the process of evaluating the significance of some property types. See **Appendix E** for current information about existing historic contexts and Multiple Property Documentation Forms for Vermont. Archeological sites relating to a detailed historic context that meet the property type’s registration requirements may

be considered significant by the SHPO even though they are not associated with the priority topics listed in Section **4.5.2.**

4.3. INTEGRITY

A site must, at minimum, possess integrity to be significant. The National Register criteria require that a site possess integrity of location, design, setting, materials, workmanship, feeling, and association. The National Register Bulletin “*How to Apply the National Register Criteria for Evaluation*” provides detailed guidance on the complex topic of integrity. In addition, National Register Bulletin Number 36, “*Guidelines for Evaluating and Registering Historical Archeological Sites and Districts*,” provides a detailed discussion of the various aspects of integrity, specific integrity requirements for the four individual significance criteria (A, B, C, and D) and many useful examples. Accordingly to *National Register Bulletin 36*, integrity of association is especially relevant under Criterion D, “integrity of association is measured in terms of the strength of the relationship between the site’s data or information and the important research questions (*National Register Bulletin # 36*, Page 21).

Some examples of excellent site integrity include:

- Likely or known to have intact features/deposits that are temporally and spatially distinct.
- Likely or known discreet deposits and/or assemblages that are not feature deposits.
- Likely or known catastrophic destruction resulting in encapsulation of site.

4.4. ESTABLISHING PRECONTACT SITE SIGNIFICANCE

While precontact archeological sites may be eligible for inclusion in the National Register under Criteria A, B, and C, their significance is most often established under Criterion D. Extensive site investigations in Vermont lead us to conclude that a precontact site will meet Criterion D if it has the following characteristics:

- a. The site has integrity; and
- b. The site is tied to one or more historic contexts identified as important in the Vermont Historic Preservation Plan or other relevant document; and
- c. The site contains multiple categories of data; and
- d. The site can help answer specific, detailed questions that are important to understanding Vermont precontact or contact period and can be justified as having value to the public.

Categories (a) and (b) have been addressed in Sections **4.2.** and **4.3.** above. The following addresses expected site characteristics related to (c) and (d) above.

4.4.1. THE SITE MUST CONTAIN MULTIPLE CATEGORIES OF DATA

A site must contain - - - or be likely to contain - - - sufficient categories of data to address important research questions. The University of Vermont’s Consulting Archeology Program developed the following matrix of data requirements to guide precontact evaluations of site significance. Applying this matrix as early as possible in the course of field investigations is one

useful tool to begin to assess site significance. This matrix may be applicable to some types of historic period sites as well.

The general Research Topics in the left column of the matrix refer to specific research questions described in “*Vermont’s Prehistoric Cultural Heritage*.” To address a particular Research Topic, sites must at minimum contain the types of data shown in the right hand columns.

RESEARCH TOPICS	DATA REQUIREMENTS (see details below)							
	1	2	3	4	5	6	7	8
Adaptation	X	X	X	-	-	-	-	-
Chronology	X	X	X	-	-	-	-	-
Technology	X	X	-	-	-	-	-	-
Exchange/trade	X	X	-	-	X	-	-	-
Settlement system	X	X	X	X	X	-	-	-
Subsistence system	X	X	X	X	-	-	-	-
Socio-political organization	X	X	X	X	-	-	-	-
Human biology	X	X	X	-	-	X	-	-
Belief system	X	X	X	-	-	-	X	-
Environmental change	-	X	-	-	-	-	-	X

Data requirements for a site to address the respective research topics:

1. Site contains items, deposits, and/or surfaces that can provide inferences about relevant past activities.
2. Site contains items or deposits that can identify the site’s time period.
3. Site possesses spatial relationships among items, deposits and/or surfaces which can be reconstructed.
4. Site contains deposits with floral, pollen, faunal or other botanical and zoological data.
5. Site contains items whose potential source area(s) can be identified.
6. Site contains the remains of at least one inhumation sufficiently preserved to permit analysis of diet, health, pathologies, or demographic data; or contains evidence of at least one cremation.

7. Site contains non-utilitarian items or deposits that can provide inferences about past beliefs.
8. Site contains natural or cultural deposits or surfaces with data pertinent to paleo-environmental reconstruction (including past vegetation, fauna, landscape, water sources, or climate) of the locale or larger region.

4.4.2. THE SITE MUST BE ABLE TO ANSWER SPECIFIC, DETAILED QUESTIONS IMPORTANT TO UNDERSTANDING VERMONT PRECONTACT AND CONTACT PERIOD HISTORY

The research questions in “*Vermont’s Prehistoric Cultural Heritage*” and the broader questions below provide a baseline for examining a precontact site’s potential significance. The research questions below are organized by research topic listed in the matrix on the previous page.

To answer these research questions, at a minimum sites must contain certain categories of data and characteristics. Evaluations of site significance must be as specific as possible in relating a research question to available or presumed site data. Significant sites contain categories of data that have a high likelihood of providing important information that will respond to one or more of these questions.

Settlement System (including Human Populations):

- How many people lived in Vermont during the precontact period? 5000? Or 50,000?

Adaptation:

- How did Native people successfully survive Vermont winters? How did changes in climate affect the people? How did people successfully adapt to colder-warmer climates?
- How and why did lifeways and technologies change or not change in Vermont over time? What caused changes? How long did changes take? How did changes in one aspect of life affect other aspects of life? Did different parts of Vermont see different changes? Where and why?
- How and when did contact with Europeans effect the original Vermonters?

Environmental Change:

- Did lifeways change during the Little Ice Age (ca. 1400-1500 AD)? How?
- Did Vermont’s earliest inhabitants co-exist with extinct mammals?
- How did Vermont’s environments and climate change through time and how did native people adapt to these changing conditions?
- What was the distribution of native flora and fauna (including native fish species) over time?

Exchange/Trade:

- How did Vermont’s native people fit into the tremendous northeastern and broader regional trading networks that began in the earliest period of Vermont prehistory? What did the people receive and what did they trade out? Why?

Subsistence System:

- How did farming develop in Vermont? When? Where? Did the introduction of farming change the quality of life for Vermont's native people?

Socio-political Organization:

- From where and when did the Abenaki originate?
- Were there different, and separate, Native American cultural communities in Vermont during precontact and contact? If yes, where were these communities located? How did they interact? What did they have in common? What were their differences? How do we recognize them in the archeological record?
- Was there ethnic continuity in Vermont's native people over the entire pre-contact period? If yes, were there breaks/gaps in that continuity? If no, what ethnic differences, changes existed?

Belief System:

- Where are the Native American burial sites? Why did burial practices change over time? How can we better predict, and thus better protect, the locations of Native American cemeteries and burial sites from different periods of history?

4.5. ESTABLISHING HISTORIC PERIOD SITE SIGNIFICANCE

In Vermont the "historic period" begins in 1609, when Champlain "discovered" the lake he named after himself. Historic period archeological sites, even those with good integrity, do not automatically have historic significance. The VTSHPO will only support archeological investigations of historic period archeological sites during the regulatory process if they have a very high likelihood of providing important information that cannot be obtained from other sources.

In contrast to precontact sites that can only be discovered and studied through archeological investigation, many kinds of historic period sites can be understood through historic maps, photos, drawings, written records and, sometimes, oral histories. For these kinds of historic sites, it is critical to ask at the earliest time possible whether they might have archeological significance and how archeological methods at that site can significantly and measurably improve our understanding of Vermont's history. The Minnesota State Historic Preservation Office's Archeological Manual pointedly states:

The question of "importance" [of historic period sites] needs to be addressed carefully and should also be phrased "Important to whom?" If the site is important to just one historical archeologist or to just a few members of a community, its [significance] will be difficult to justify (Scott Anfinson, *SHPO Manual for Archeological Projects in Minnesota*, Minnesota SHPO, St. Paul, MN, September 2000).

Some types of historic period sites do not have the potential to provide information important to a broad public. Some sites, for example, many types of mills, are well documented in written and other records and many exist as standings structures; archeological investigations may not

provide useful or outstanding complementary information. In such a case, historic research may be far more informative than an archeological investigation.

The VTSHPO has developed several new policies about historic period archeological sites. A site shall be studied archeologically in the regulatory process if:

- 1) It addresses or is likely to address in a significant way the priority research topics listed in these guidelines.
- 2) It has the potential to add important information to the written and archival record.
- 3) It addresses research questions significant to a broad audience.

4.5.1. WHAT DOES THE VTSHPO CONSIDER A “SITE” IN THE CONTEXT OF HISTORIC PERIOD ARCHEOLOGY?

For purposes of this discussion, a “site” must involve an assemblage or cluster of data sets that usually includes foundations, ruins, or some type of structural remains, features, deposits, and other man-made alterations to the landscape that can be investigated using a combination of historic research and archeological investigations to varying degrees. Some kinds of important sites were temporary occupations or encompassed traditions or activities that did not produce foundations, ruins, or other structural remains. In such cases, features and deposits are the core site components.

A second category of “site” are the archeological deposits associated with a National Register eligible or listed property that (1) relates to one of the priority research topics, and (2) can contribute important archeological information about the property that is not available through records or that significantly supplements records.

4.5.2. PRIORITY RESEARCH TOPICS TO HELP EVALUATE SIGNIFICANCE OF HISTORIC PERIOD SITES

In the context of historic archeology, there are as many research topics and questions as there are scholars asking them. They need to be pared down to what’s most important to a broad public. The following research topics were identified by the SHPO as priorities since they may only be addressed through archeological study. If a potential or identified historic period site can address these topics and related, important research questions, the site will be further considered by VTSHPO and may be recommended for further investigation through the regulatory process.

Furthermore, archeological sites relating to a detailed historic context that meet the property type’s registration requirements may be considered significant by the SHPO even though they are not associated with the priority topics below.

The research topics listed below are general. They are intended to be used as a guide to assist in determining site significance. Compelling sites that don’t fall into these categories may still be considered by the VTSHPO if they demonstrate the likelihood of providing important information to a community or to the state.

Priority research topics important to Vermont history that may be addressed through archeology at individual sites:

- Native people and their communities after European contact.
- 17th and 18th century military history.
- War of 1812 and Civil War in Vermont.
- Abandoned communities (Vermont's "ghost towns").
- 18th Century French in Vermont.
- Early Euro-american settlement (ca. 1760 – 1800, although may be later in northern Vermont), including farmstead economy and technology, industry and commerce, health and nutrition, and transportation.
- Pre-1870 industries and commercial enterprises.
- Unanswered questions about Vermont's ethnic and minority groups.
- Vermont's maritime history.
- Unwritten stories of important Vermonters (pre-1900).
- Unique, rare, highly unusual, and exceptional federal, state, and local public works.
- Unique, rare, highly unusual, and exceptional sites.

4.5.3. IDENTIFYING IMPORTANT RESEARCH QUESTIONS AND NECESSARY DATA SETS

The consulting archeologist must first identify specific, important research questions that can be addressed at the site through archeology that have not already been answered by historic documents or that are not likely to be answered by the historic record. Second, it's necessary to identify specific data sets that must be present at, as well as recoverable from, the site to answer the research questions.

4.5.4. QUALITY OF SITE EVIDENCE

Archeology is ultimately about site discovery; hence, the expression "seek and ye shall find" applies strongly to our discipline. However, regulatory archeology requires a greater degree of focus in this quest to ensure that public and private funds are spent with the reasonable chance of discovering and researching sites that are important to the state and to individual communities.

Accordingly, the quality of the evidence about a site's existence in a particular location is an important consideration for the VTSHPO in determining whether or not to proceed with assessing an historic period site.

Some examples of strong evidence for the existence of a site(s) in a given location include:

- A recorded site.
- Specific documentary reference to a site in that location from historic research.
- Specific reference to a site in that location from knowledgeable local individuals.
- Visible ruins and features on the ground surface.

- Geographic or historic context that suggests the existence of a site or particular category of site (for example: the presence of an early road --often associated with early homesteads; known French “seigniories” along Lake Champlain; etc.)
- The standing structure itself is listed on or eligible for the National Register and is associated with a priority research topic: it may have archeological components that contribute important archeological information.

4.5.5. SUMMARY OF INFORMATION NEEDED BY VTSHPO TO DETERMINE IF SITE ASSESSMENT PROCESS SHOULD CONTINUE

As early as possible in the historic period archeological assessment process (ARA or Phase I), the consulting archeologist should determine and demonstrate to the VTSHPO that:

- 1) The site has the potential of addressing one or more of the priority topics in **4.5.2.**
- 2) There is strong evidence for the site’s existence in that location.
- 3) The site has the potential to answer -- through excavation – specific, important research questions.
- 4) The research questions being asked are of interest to a broad audience.
- 5) The site is likely to contain specific and recoverable categories of data that answer the research questions.
- 6) The site exhibits integrity or the likelihood of integrity.

5.0. STANDARD ARCHEOLOGICAL PRACTICES and SOME DEFINITIONS

5.1. FIELD METHODS

The following guidelines outline standard field practices for archeological investigations in Vermont. The VTSHPO is seeking a common sense approach to archeological investigations and is open to discussion of alternative techniques and strategies on a case-by-case basis. Alternative approaches should be determined in consultation with the VTSHPO and the project sponsor prior to development of the Research Design, or during Scope of Work review.

5.1.1. SURFACE SURVEY

Surface survey on recently plowed agricultural fields may be an appropriate method for efficiently identifying the presence of a site. Walking transects of 1 –2 meters apart is recommended to find evidence of small sites. To allow for artifact recognition, the plowed surface must have recently received a minimum of ½” of rain to wash dust and soil off of artifacts.

Plowing should only be used as an archeological field method if a plowzone already exists. If plowing the ground surface is being considered as a field investigation method and the surface is not now an open plowed field, it is necessary to first verify the existence of a plowzone through preliminary sub-surface testing prior to plowing. The importance of this has been demonstrated repeatedly: plowing a field that has never been plowed, or plowed generations ago to a shallow depth, can destroy a site. Harrowing a recently plowed field is appropriate; harrowing an old hay field or fallow field may not be appropriate.

In floodplains, stratigraphic assessment is necessary to confirm suitability of surface collection as an appropriate method because in such cases plowing may not reach the depth of the precontact deposits. At a minimum, subsurface test pits are necessary to verify depth of plowzone, existence of buried plowzones or cultural levels, and stratigraphic context. In complex floodplains, deep backhoe testing may be necessary to obtain this information.

Once it has been confirmed that a field has been plowed and if plowing is selected as the preferred investigative method, the next step is to determine the depth of past plowing so that plowing conducted to facilitate site discovery goes no deeper.

5.1.1.2. GROUND SENSING METHODS FOR HISTORIC PERIOD SITES

Historic period archeological sites may be more readily discovered using modern technology such as metal detectors, ground penetrating radar (GPR), and electro-magnetic induction. These methods may be beneficial to guide the locations and configurations of subsurface testing. Typically, these technologies would be applied during Phase I investigations but can be used in all assessment steps, including as a step in the ARA.

5.1.1.2. GROUND SENSING METHODS FOR PRECONTACT SITES

If large cultural features are anticipated at a precontact site, GPR and electro-magnetic induction may be useful guides to help focus subsurface investigations.

5.1.2. SUB-SURFACE TESTING

5.1.2.1. SHOVEL TEST PIT METHODOLOGY

The standard test pit interval for subsurface shovel testing is 10 meters. However, expected site size, landscape features, or the research design may require intervals of more or less than 10 meters. For example 2 meter to 8 meter intervals may be appropriate depending on expected site type, micro-topography, results of initial test pits, and other factors.

Shovel test pits should be square and at least 50 centimeters on a side. All pits should be excavated into the C-horizon (that is, through the full A/Ap and B horizons), and the soil should be sifted through a maximum mesh size ¼." Use of 1/8" mesh is appropriate in special site areas, such as features or lithic workshops, if the Research Design requires this level of investigation and data collection, and generally in Phase III investigations. Depth provenience should be recorded by soil level if possible.

Small test pit methodology may be inappropriate for identifying and investigating historic period archeological sites and is usually inadequate for locating deeply buried sites in floodplains.

5.1.2.2. TEST UNITS

Larger test pits, or test units, are generally excavated during Phase II and III investigations when parts of the site need to be intensively studied. In special cases, test units may be appropriate during Phase I investigations to examine stratigraphy, accelerate assessment of site character and site significance, and identify historic period archeological sites, for example.

Test units can be of varying sizes, shapes, and depths depending on the objectives of the investigation, type of site, stratigraphy, soils, etc., but will be excavated by hand using trowels and/or shovel skimming; features should always be trowelled. Arbitrary levels within soil horizons should be no thicker than 10 centimeters. The plowzone may be removed as one unit if reliable stratigraphic data over an area determines that this is an appropriate strategy.

5.1.2.3. DEEP TESTING

Hand excavation of deeper test units and/or mechanical excavation may be necessary to identify buried cultural deposits in floodplains and other depositional settings. Mechanical excavations (typically backhoe) have the advantage of being quick, but unless they encounter some obvious cultural deposits, such as a feature, they may not be sufficient to determine whether or not buried cultural deposits exist. Hand excavation of larger test units (for example, 2.0m x 1.0 m or 2.0 m x 0.5m) has the advantage of identifying cultural deposits, where present, through excavation and

sifting of all sediments. In cases where deep testing is warranted, VTSHPO recommends that it be consulted during preparation of the Research Design.

5.1.3. RECORDING MEASUREMENTS

In general, all measurements will be recorded in the metric system. In cases of historic sites, including shipwrecks, and after consultation with the VTSHPO, English measurements can be reported with metrics in parenthesis.

5.1.4. ESTABLISHING A PERMANENT SITE DATUM

A permanent site datum must be established with GPS on a potentially significant site at the conclusion of the Phase I investigation so a site or sites can be relocated. If such a permanent datum is not possible (for example, due to landowner concerns, etc.), then additional GPS positions should be taken and recorded for several nearby pre-existing, permanent reference points to help in site relocation.

5.1.5. ISOLATED FINDS

A true *isolated find* is an artifact lost or discarded in use; there is no associated site that would provide important information about some past human activity. A single Native American projectile point lost in use comprises a typical isolated find. Underwater, a bottle tossed off a boat is a common isolated find. However, most seemingly “single” precontact artifacts - - such as a flake or scraping tool -- found in a shovel test pit or on the ground surface are not isolated finds. Rather, they provide a clue that a site exists in the area around that artifact.

5.1.5.1. TREATING ISOLATED, OR LIMITED, SURFACE ARTIFACTS

Precontact and contact period sites identified through systematic surface survey in cultivated fields require excavation of at minimum 2-4 shovel test pits in the area of each surface concentration. The number of additional test pits should be based on the size of the surface concentrations. The purpose of these additional test pits is to document soil profiles within these concentrations and provide preliminary information on the potential for sub-plowzone site components or deposits. This additional information will improve planning for any Phase II field investigation that may be necessary. Some types of potentially significant historic period sites, for example, those pertaining to military encampments, French settlements, or early Euro-american settlement, may also need this type of treatment.

5.1.5.2. TREATING ISOLATED, OR LIMITED, SUB-SURFACE ARTIFACTS

Positive test pits containing precontact cultural materials are considered “isolated” if they are separated by at least 24 meters **and** if they only contain a single artifact. In these instances, it is possible to eliminate the need for any subsequent testing by excavating twelve additional test pits at reduced intervals around the original test pit. No further testing is needed provided all additional test pits are negative and a larger unit contiguous with the first test pit produces no new information. If any of the additional test pits are positive, or if other types of artifacts or

cultural deposits are identified around the initial find spot, more comprehensive Phase II testing may be needed to evaluate the site and assess potential project impacts. Positive Phase I test pits that contain multiple precontact artifacts or are less than 24 meters apart confirm the existence of a site and thus do not need additional sampling during Phase I. Some types of potentially significant historic period sites, for example, those pertaining to military encampments, French settlements, or early Euro-american settlement, may also need this type of treatment.

5.2. DEFINING PREVIOUS “SIGNIFICANT” GROUND DISTURBANCE

Significant ground disturbance means that any potentially important archeological site was heavily disturbed or destroyed by some action prior to the proposed project. Past plowing, cultivation, and logging do not necessarily constitute "significant" ground disturbance since studies have shown that important cultural information can be retrieved from plowzones and logged surfaces. Deeper deposits such as fire hearths and garbage pits may also exist intact under the plowzone. In many cases, filling (on land or underwater) may not constitute "significant" ground disturbance since intact, important precontact and historic period sites may lie buried beneath the fill layer.

5.3. WINTER LIMITATIONS

The “field” season runs from late spring - - following snow melt, ground thaw, and dryer soil conditions - - until mid-November when snow begins to obscure the ground surface and/or the ground freezes. Site visits in winter when topographic features are buried in snow are not usually productive. Investigations during cold and wet weather are generally also unproductive unless special provisions for shelter and heat are made in the area being investigated. The VTSHPO discourages both site visits and field investigations in winter conditions.

5.4. PERMITS FOR ARCHEOLOGICAL INVESTIGATIONS ON STATE LANDS, STATE ARCHEOLOGICAL LANDMARKS, UNDER STATE WATERS, OR ON FEDERAL LANDS

The *Vermont Historic Preservation Act* (22 VSA 14, sections 764 and 782) requires that all field investigations conducted on state lands, within the boundaries of a designated State Archeological Landmark, or under state waters be conducted under permit to the VTSHPO (see <http://www.leg.state.vt.us/statutes/title22/title22.htm>).

State lands include all lands owned by any state agency, including, for example, the VTSHPO; the Departments of Forests, Parks and Recreation and Fish and Wildlife; and the Vermont Agency of Transportation. Such lands may include state owned historic sites, state parks, wildlife management areas, state forests, lands purchased for Right of Way, or lands purchased to allow for construction of state projects such as highway improvements or new construction.

Permits are required for any field investigation that has the potential of disturbing, destroying, or otherwise altering a site or sensitive area or cultural materials and other data that may be contained within the site or sensitive area. Permits are not required for desk reviews, walkovers, photographic documentation, and other non-disturbing research and activities. Permit applications and information about the application process is described in **Appendix F**.

Archeological consultants generally apply for permits on behalf of the applicable state agency or other client. The relevant state agency must also sign the permit application.

In accordance with the federal *Archeological Resources Protection Act of 1979 (ARPA)*, it is illegal to excavate or remove archeological resources from any federal land without a permit from the federal land manager (<http://www2.cr.nps.gov/laws/archprotect.htm>). Examples of federal land managers in Vermont include the U. S. Forest Service and the U.S. Fish and Wildlife Service, among others. Individual land managers should be contacted for ARPA permit application information.

5.5. CONSIDERING STANDING STRUCTURES IN THE PROJECT AREA

Project areas may contain standing buildings or structures. Any building or structure older than 50 years may be eligible for inclusion on, or may already be listed in, the State or National Registers of Historic Places (that is, it may be historically significant). In the course of routine background research, consulting archeologists should establish whether any building, structure, complex or district within the project area is currently listed on the State and/or National Registers of Historic Places. These documents are on file at the VTSHPO's Resource Center in Montpelier. If listed on the State or National Registers, the form (or relevant portion of the form) should be copied and appended to the ARA or archeological investigation report. Relevant historic information available on the State or National Register forms should be incorporated into the background research.

Consulting archeologists are not responsible for evaluating the architectural or historic significance of a structure or district or for assessing project impacts to standing structures. However, depending on the project circumstances, if no other documentation exists in the VTSHPO State or National Register files, it may nonetheless be useful to document buildings and structures within the project area at a minimum level of documentation. The consulting archeologist should discuss with the project sponsor the desirability of compiling minimum documentation on buildings or structures within the project's APE. While judgements about a structure's architectural integrity and historic significance will be made by qualified professional architectural historians, the archeologist, on the other hand, may be able to contribute useful and important information on the structure's history and historic context (s).

Depending on the Scope of Work and project circumstances, it may be necessary or desirable for the consulting archeologist to complete the locational and descriptive sections of the Vermont Historic Sites and Structures Survey form and photograph each building or structure if no State or National Register documentation exists. This documentation should be appended to the ARA or investigation report. Both descriptive and historic information should be summarized in, or fully incorporated into, as appropriate, relevant sections of the study report.

When appropriate, the Research Design for the archeological investigation may require subsurface testing in the perimeter of the standing structure to identify and evaluate potentially significant archeological resources associated with the structure. Archeological investigations around a structure should only be undertaken if they have a high likelihood of providing

important new information on the structure or complex. If appropriate, recommendations should be made in the investigation report for amending the existing State or National Register forms.

5.6. “PRECONTACT” AND “PREHISTORIC”

“Precontact” and “prehistoric” describe the approximately 12,000 years of Native American history prior to contact with Europeans. The VTSHPO has, in the past, generally used the term “prehistoric” to refer to the very long span of human history before written records were kept.

However, “precontact” recognizes that history is not always written. Vermont’s Abenaki community as well as archeologists and historians who work in Vermont overwhelmingly support the use of “precontact.” Thus, the VTSHPO uses “precontact” throughout these Guidelines to describe the thousands of years of rich Native American culture before European contact. The terms “prehistoric” and “precontact” are interchangeable and using one or the other is a personal preference.

5.7. PROTECTION OF SENSITIVE ARCHEOLOGICAL SITE LOCATIONAL INFORMATION

In the VTSHPO’s experience, more sites are destroyed by lack of knowledge than by looting. Public education about archeological sites is an important goal for Vermont archeology. Generally, disseminating results of field investigations to local governments and other community organizations, landowners, libraries, and interested citizens is the preferred practice. However, to protect especially fragile, vulnerable, or threatened sites, the *Vermont Historic Preservation Act*, as amended (22 VSA 14, section 761), establishes that the location of archeological sites, both on land and underwater, shall be confidential. Under law, the State Archeologist may provide locational information to appropriate individuals and organizations for research and planning purposes (see **Appendix A**). See related Title 1 of *Vermont Statutes Annotated*, Chapter 5, Section 317 (20) that exempts archeological site locations from the “right-to-know” law. Specific project or site concerns with publishing or distributing site locations in reports or electronically should be discussed with the VTSHPO as they arise.

5.8. DEFINING SITE BOUNDARIES

Understanding the boundaries of a significant, or potentially significant, site is fundamental to designing appropriate treatment for the site and not accidentally destroying part of it. Generally, establishing a site’s boundaries should occur independently of any other arbitrary sampling boundary if there are ambiguities between the project’s impact area and the site’s boundaries. Sometimes, a site is suspected to extend into part of the APE that had not been previously identified as sensitive. When this occurs, the consulting archeologist should inform the project sponsor and VTSHPO. The VTSHPO will request that additional site boundary testing be conducted in the area not originally identified as sensitive.

6.0. INVOLVING THE PUBLIC

The regulations that implement Section 106 of the National Historic Preservation Act, 36 CFR 800, require enhanced public participation as early as possible in project planning (see various at <http://www.achp.gov/work106.html>). Section 800.2 (d) of the regulations requires that the federal agency or its delegate (sometimes the archeological consultant) seek and consider the views of the public. The following list identifies some of the individuals, organizations, and groups who may have an interest in the proposed undertaking and in potentially affected historic and archeological resources. This list is not exhaustive.

In accordance with 800.2 (d) (1), the extent and nature of the “publics” should reflect the scale and complexity of the project and its effects; the relationship of the federal government to the project; and likely public interest or controversy, among other considerations. The VTSHPO can assist in identifying potential “publics” that may have an interest in the project.

- ***Certified Local Governments.*** Contact information and a current list of Vermont towns with a CLG can be found at: http://grants.cr.nps.gov/CLGs/CLG_Search.cfm
- ***Historical societies.*** The Vermont Historical Society maintains a list at their web page: <http://www.state.vt.us/vhs> Go to “**Local Societies.**”
- ***Non-Profit Organizations.*** Examples include the Preservation Trust of Vermont, local land trusts, The Nature Conservancy, etc. Also see Special Interest Organizations, below, many of whom are non-profits.
- ***Special Interest Organizations.*** Examples include the Crown Point Road Association, Vermont Chapter of the Civilian Conservation Corps, Vermont Old Cemetery Association, Lake Champlain Basin Program, Lake Champlain Maritime Museum, etc. Most of these organizations maintain web sites that can be consulted for contact and other information.
- ***Abenaki and Other Native American communities.***
 - ◆ Governor’s Advisory Commission on Native American Affairs
c/o Jeff Benay
Indian Education Office
49 Church St.
Swanton, VT 05488
 - ◆ Abenaki Self Help Association
PO Box 276
100 Grand Ave.
Swanton, VT. 05488
(802) 868-2559
FAX: (802) 868-5118
<http://www.abenakination.org/history.html>

- ◆ Stockbridge-Munsee band of the Mohican Nation
Sherry Firgens
Stockbridge-Munsee Cultural Preservation Officer
N8476 MohHeConNuck Road
Bowler, WI 54416

- ***Town Clerks.*** Town Clerks may be able to identify individuals and organizations in their community that may have an interest in the project and in affected historic properties.

7.0. ARCHEOLOGICAL FIELD INVESTIGATIONS

7.1. RESEARCH DESIGN: ALL PHASES

The Research Design is the core of any archeological investigation. It explains the need for an archeological study in a given place. The archeological research design describes the research questions being asked, the kinds of data that can be used to answer the questions, the kinds of sampling and field methods that will best locate and recover the data, the most relevant techniques of data collection and analyses, and how the results will be evaluated in reference to the expectations.

7.1.1. STANDARDS FOR PREPARING RESEARCH DESIGNS: ALL PHASES

All Research Designs should meet the following standards.

1. Research designs must reflect the nature and scope of the project, the types of sites expected or known, potential impacts to significant sites, and other relevant factors.
2. Proposals should focus on the project area; on background research relevant to understanding the project area and sites it may contain; and on expected, or known, significant sites that may exist within that project area.
3. An appropriate level of research should be completed prior to developing the Research Design for any phase of investigation as a foundation for the task.
4. Research designs must meet *The Secretary of the Interior's Standards and Guidelines for Identification, Evaluation, and Archeological Documentation (Standards and Guidelines)* (see http://www.cr.nps.gov/local-law/arch_stnds_0.htm). The basic expectation for any Research Design is modeled from the *Standards and Guidelines*. These VTSHPO Guidelines describe the federal expectations and set forth additional requirements.
5. Phase III Research Designs must be guided by the Advisory Council on Historic Preservation's *Recommended Approach for Consultation on Recovery of Significant Information from Archeological Sites* (see **Appendix G**).
6. Investigation methods must be selected that are most appropriate to expected site types and their potential significance. The following questions can help guide choices of methods:
 - What don't we know?
 - What is worth learning?
 - Can we learn from this site?
 - What are the best methods to achieve that learning?
 - Is digging necessary to learn?
 - For historic period archeological sites, can we learn without digging?

7.2. SCOPES OF WORK: ALL PHASES

All phases of archeological investigation require a Scope of Work (SOW). The SOW informs the project sponsor about the work to be performed, sets forth expectations, provides a schedule and a cost estimate and budget for the task at hand, and provides the justification for the work.

The VTSHPO recommends that the SOW be incorporated in full into any project contract between the archeological consultant and the project sponsor. This will help ensure that all parts of the archeological study will be completed and are the joint responsibility, under contract, of the project sponsor and his/her consulting archeologist.

7.2.1. PREPARING A SCOPE OF WORK

The Scope of Work sets forth the project's research design and includes, at minimum, a detailed discussion of:

- Specific legal jurisdiction under which study is being undertaken (see Section **1.1.** and **Appendix A**).
- Sources of public funding, if any.
- Client for whom study is being conducted and if project sponsor is different than client.
- The proposed development and the project's area of potential effect, including number of acres/hectares involved in project.
- Research design.
- Potential project impacts.
- Content and format of study report (and draft report, if appropriate).
- Public education and outreach efforts, as appropriate (see Section **9.0.**).
- Care and management of archeological collections, data, and records (see Section **10.0.**).
- Estimated schedule in calendar days of all study tasks, including background research, beginning and ending date of field work, analyses and interpretation, report, public education and outreach activities, and any other major task.
- Names of key personnel responsible for different study tasks and level of personnel effort to be utilized.
- Budget (this information is provided to clients and is not generally provided to the VTSHPO).

Cost estimates and budgets for an archeological study should clearly identify all costs and special "add-on" costs, if any.

7.2.2. VTSHPO REVIEW OF SCOPES OF WORK

The VTSHPO recommends that Scopes of Work be submitted to it for review and comment. VTSHPO review of a draft SOW may reduce the need for later revisions that may involve requests for additional work. The VTSHPO may request revisions in the Scope of Work that require more field work or background research, or, the VTSHPO may recommend less work. From the VTSHPO's point of view, the most important aspect of the SOW is the Research Design. The VTSHPO will review Scopes of Work for Phase I studies within 15 days. Phase II and III scopes are viewed as collaborative efforts requiring more time and interaction among the VTSHPO, archeological consultant, and project sponsor. VTSHPO review of a Phase II or III SOW shall be completed within 30 days following a formal request. The SOW can be submitted to VTSHPO by the project sponsor or consulting archeologist.

7.2.3. COLLECTIONS CARE AND MANAGEMENT ISSUES IN SCOPES OF WORK

The Scope of Work must indicate how and where all field notes, records, artifacts, other data sets, and report that may be assembled will be cared for and managed. If the land is privately owned, it will be necessary to discuss several options since the landowner may choose to retain all, part, or none of the collection. In the SOW, consulting archeologists must inform project

sponsors about the various complex issues relating to collections care and management as described in these Guidelines. Responsibilities for collections gathered during the investigation will differ depending on whether the land is privately or publicly owned, whether the project is privately or publicly funded, relevant statutory jurisdictions, existence of a 22 VSA Chapter 14 permit, and other factors such as the existence of Programmatic Agreements or Historic Property Management Plans (formerly called Cultural Resource Management Plans). Phase II and III scopes of work must describe in detail how all classes of data will be cared for and managed after recovery.

7.3. PHASE I INVESTIGATION: IDENTIFICATION STUDY

Federal regulations that implement Section 106 of the National Historic Preservation Act refer to “identification of historic properties.” The federal, legal definition of “historic property” is “any precontact or historic district, site, building, structure, or object included, or eligible for inclusion, in the National Register of Historic Places.” Thus, the goal of “identification” studies under the federal process is to locate National Register eligible (i.e. “significant” or “important”) sites.

Practical considerations generally necessitate that archeological investigations be divided into separate, sequential phases. The intent of the phased approach is to provide a practical framework for estimating the cost of finding a site and, then as a second step, for gathering additional detailed information for evaluating a site’s significance. If a site can be determined significant at the completion of Phase I, it should be. If identifying and evaluating a site’s significance is practical as a single step for a particular situation, then that should occur. The Guidelines emphasize the VTSHPO’s goal of determining site significance as soon as is possible, based on available evidence, using the considerations discussed in Section **4.0**. Accordingly, the Research Design requirements for Phase I require definition of what is potentially significant.

Goals for Phase I Investigation are:

- Locate archeological sites potentially eligible for the State or National Registers that may exist within the proposed project area, or, terminate assessment.
- Meet the objectives of the Research Design.

Although an Archeological Resources Assessment (ARA) is generally conducted before beginning a Phase I field investigation, sometimes an ARA may not have been undertaken. In this case, minimal levels of research like those done in an ARA must be completed prior to

beginning the field investigation. The sequence for conducting detailed background research and field investigation depends on the research design and expected site types. For example,

completing background research prior to field study is recommended if the ARA showed evidence of an historic period archeological site or if historic period archeological sites are expected. Supplemental background research is often important after completing field work to better understand what was found and why it may be potentially significant.

7.3.1. PERFORMING IDENTIFICATION

7.3.1.1. RESEARCH DESIGN REQUIREMENTS FOR PHASE I

The goal of the Phase I Research Design is to find sites that are likely to meet the National Register criteria and describe appropriate methods to find such sites. The Research Design describes the types of significant sites that are likely to be found, kinds of specific data likely to be found in such sites, the research questions addressed by this data, known comparable types of sites and their data, why finding such sites can contribute to our knowledge of Vermont prehistory and/or history, and appropriate methods needed to find the site. Research designs are part of a Scope of Work.

The Phase I Research Design shall meet the Standards set out in Section **7.1.1.** and should, where applicable, include the information outlined as a checklist in **Appendix H.**

7.3.1.2. CONDUCTING BACKGROUND RESEARCH

The extent of background research must reflect the research design, scope and potential impacts of the project, characteristics of the project area, and types of resources expected. For example, detailed information about physiographic region, climatic change, past and present fauna and flora, and other environmental topics should be presented **only if it has direct relevance to the project area's potential precontact or historic site values and the expected site types.**

Archeological research must relate to and refine Vermont's Historic Contexts by addressing and refining relevant research questions. Where appropriate, research can also relate to other local, regional, or national historic contexts, research questions, and issues. The *Secretary of the Interior's Standards and Guidelines for Identification* discuss the role of identification in planning and should be used for guidance (<http://www.achp.gov/secstnd.html#SID>). The VTSHPO has developed additional guidance that should be used, where appropriate: see **Appendix H.**

7.3.1.3. CONSULTING THE COMMUNITY AND KNOWLEDGEABLE INDIVIDUALS

Background research may include interviews with community members and other knowledgeable individuals. Important information on potential site locations, land use patterns,

and historic disturbances may be provided by local artifact collectors, historical society members, landowners, Native Americans, and other community members, as appropriate to the research design, extent of the project, the characteristics of the project area, and other relevant factors (see Section **6.0.**).

7.3.1.4. PHASE I FIELD INVESTIGATIONS

Conduct the appropriate field investigations described in the Research Design. Field investigations may include, but are not limited to, surface survey, sub-surface testing, remote sensing studies, and combinations of these or other field techniques (see Section **5.0**).

1. Preliminary field investigations may sometimes be required specifically to identify stratigraphic or other conditions within the project area. For example, backhoe trenching is often necessary in floodplains to identify the depositional history and relative age of the landform and expose possible buried cultural layers (see Section **5.1.2.3.**).
2. Depending on factors such as the scope of the study, known or expected site types, environmental characteristics of the project area, and so forth, interdisciplinary field investigations using soil scientists, geologists, biologists, architectural historians, historians, etc., may be required. The Research Design should anticipate and include such interdisciplinary expertise.
3. VTSHPO expects that considerations of site significance, to whatever extent possible based on existing data, are integral in all aspects of archeological assessment, from the ARA, through Research Design development, and during the Phase I investigation (see Section **4.0**)
4. Determination of site "presence" or "absence" is **not** a satisfactory result of Phase I investigation. Phase I site documentation should provide enough information to recommend: treatment (for example, site avoidance); additional background research; recovery of additional information to gain a preliminary evaluation of site size, character, and significance; or, if there is sufficient evidence, a determination that the project will not effect a significant site.
5. In cases of limited artifacts or site evidence, it is difficult to understand the site type, extent, and its potential significance or to make any kind of recommendations in the absence of additional information. Thus, isolated or limited surface or sub-surface artifacts must be evaluated further at this phase (see Section **5.1.5.**).
6. If identified potentially significant sites will be avoided by project re-design after this phase of study, site documentation at the conclusion of Phase I must, at minimum, provide clear, mapped delineation of the site's spatial boundaries **in relation to the locations of proposed project impacts**. If this is not possible, Phase II investigation will most likely be necessary.
7. As sites are found in the field, the archeological consultant must request Vermont Archeological Inventory (VAI) site survey numbers from VTSHPO. The VAI survey

numbers should be incorporated into field notes and used on cataloging forms, in data bases, on photo identification sheets, project maps and illustrations, in all project reports and other documents, and in the course of collections care and management (see Section **8.2.**).

7.3.1.5. DATA ANALYSES

The project sponsor is responsible for ensuring that the data analyses are completed once the artifacts, other cultural materials, and other types of data are removed from the ground regardless of whether or not the project is pursued. The consulting archeologist is responsible for conducting appropriate analyses and interpreting the data that tell the story of the site. The anticipated data analyses described in the Research Design are the basic analytical tasks that will be conducted subsequent to the field investigation. The tasks set forth in the Research Design are obviously based on the types of sites that are expected to be discovered. However, once a site is identified, there may be a change in the expected analyses. For example, if a Late Archaic site is expected, no provision will have been made for analyzing and reconstructing pottery fragments. Thus, the archeological consultant needs to immediately inform the client if unexpected type and/or volume of data categories are discovered that require additional or markedly different analyses. Sometimes sufficient charcoal is unexpectedly found in a feature to merit obtaining a carbon 14 date during this phase of study.

7.3.2. REPORTING IDENTIFICATION RESULTS

7.3.2.1. PHASE I “END-OF-FIELD” LETTER

The End of Field Letter summarizes results of any phase of investigation, provides interpretations of the findings, describes anticipated project impacts to sites and sensitive areas, and offers recommendations for site treatment, additional investigations, and recommendations of no effect, among various possibilities. In many cases, determinations of project effect are made by the VTSHPO or a federal or state agency based on the End of Field Letter.

Any information or inferences about the site’s potential or apparent significance should be presented in the End of Field Letter using the considerations described in Section **4.0**. If the site is an historic period site, the End of Field Letter needs to include the information outlined in Section **4.5.5**. Specific recommendations for site avoidance, additional research, additional field investigation, construction redesign, and so forth are also discussed in the End of Field Letter.

A completed Vermont Archeological Inventory site form and topographic map with the site marked on it as a point (or shape) must be attached to the End of Field Letter (see Section **8.2.**).

See **Appendix H** for detailed guidance for completing the End of Field Letter. The End of Field Letter must be submitted to the VTSHPO and project sponsor **within 30 days of completing the field work**.

If the Phase I investigation determines that there is **no** site, or, that there is a site but the site is not significant using the evaluation tools in Section **4.0.**, the Short Report format is substituted for the End of Field Letter (see Section **7.3.2.2.**).

7.3.2.2. SHORT REPORT FORMAT

Phase I investigations sometimes result in no site being found or, a site is found but determined not to be significant. In this circumstance, the Short Report format substitutes for the End of Field Letter. The Short Report is due to the VTSHPO and project sponsor within 30 days of completing the field work. The Short Report format is not appropriate for large, complex projects even if no sites are found.

Detailed guidance for the Short Report is found in **Appendix H**.

The VTSHPO Report Documentation database form shall be completed and submitted electronically upon completion of the Short Report (see **Appendix K**).

7.3.2.3. PHASE I INVESTIGATION REPORT

Completion of the End of Field Letter does not conclude the archeological investigation if a potentially significant site is identified. A final study report must be completed. Reports are a mandatory, concluding step of an archeological investigation unless otherwise exempted. Report writing is integrated into all Scopes of Work and made part of contractual obligations for any archeological investigation.

While basic requirements for documenting Phase I investigations follow the *Secretary of the Interior's Standards and Guidelines for Identification* (see <http://www.achp.gov/secstnd.html#SID>), more than 20 years of practice have led the VTSHPO to develop more detailed guidance provided in **Appendix H**.

An outline and schedule for report writing must be presented in the Scope of Work and should be adhered to unless there are justifiable reasons why that schedule cannot be met. In general, the VTSHPO expects that the project report will be completed within one (1) calendar year of the field work. Any changes in anticipated schedule should be submitted to the project sponsor and VTSHPO at least 30 days before the report is due.

All Tables, Figures, maps (at all scales), photographs, and any other illustrative material that is necessary to the understanding of the text must appear in the report alongside the explanatory text. These illustrative materials may **not** be appended at the end of the report. Exceptions to this are: 1) oversized maps or other materials; 2) illustrative materials that are supplementary to the text and the primary illustrations; and 3) confidential maps, figures, etc., that may need to be incorporated into a confidential appendix at the end of the report.

General, generic, “boilerplate” information about Vermont’s precontact and historic contexts, physiographic zones, bedrock or surficial geology, flora and fauna and other environmental background should not be used in reports.

Sites discussed in the report, as appropriate, must be identified in the text as well as in all accompanying illustrative material by their Vermont Archeological Inventory site survey number (see Section **8.2.**).

The VTSHPO Report Documentation database form shall be completed and submitted electronically upon completion of the Phase I report (see **Appendix K**).

7.3.3. PUBLIC EDUCATION AND OUTREACH

The expected level of education and outreach at Phase I depends on the results of the investigation, project scale, extent of interested publics, and other relevant factors. See Section **9.0**.

7.3.4. COLLECTIONS CARE AND MANAGEMENT

See Section **10.0**.

7.4. PHASE IA INVESTIGATION: RECONNAISSANCE INVESTIGATION

Phase IA reconnaissance investigations are intended only for special types of projects and circumstances. Phase IA investigations are intended for large projects with multiple alignments, projects with single, wide planning corridors, projects in complex contexts, master plans, and other special circumstances. Some examples include:

- Projects with multiple alignments that require Environmental Assessments or Environmental Impact Statements (such as new highways)
- Master plans
- Management plans
- Overviews of large land holdings in which no specific developments are immediately proposed
- New pipelines and transmission lines
- Hydro-relicensing

Goals of the Phase IA investigation are:

- Conduct intensive background research.
- Identify and rank areas of archeological sensitivity.
- Identify visible archeological sites or other indicators of the presence or absence of sites.
- Identify and document extent of prior significant ground disturbance.
- Identify potential archeological issues that must be considered during project planning.

- Establish, if possible, whether or not any evident sites have a high likelihood of being eligible for the State and National Registers.

The Phase IA investigation involves a great deal more background research and more intensive field assessment than an ARA. It may require more initial consultation with the community, knowledgeable local informants, Native Americans, and other interested parties.

Other special circumstances which may require a Phase IA investigation are projects in which archeological sites are likely to exist within complex contexts. Examples include projects involving deep floodplains, or urban settings in which pavement covers potentially sensitive areas. In these cases, intensive background research, backhoe testing, remote sensing, or other methods may be necessary steps prior to developing an appropriate Research Design, Scope of Work, and budget estimates for the Phase I study. Under these special circumstances, the results of the Phase IA study can be integrated into the Phase I study report and shall **not** be prepared as a separate document unless otherwise needed.

Depending on the project size, scope, and research design, an environmental predictive model specific to the scale and scope of the project and the project area may need to be developed during the Phase IA investigation. The model is then tested during the Phase I field investigation. In some cases, for example, when the model is developed as part of a Phase IA management plan, it serves as the framework for planning future developments to minimize disturbing sensitive lands. Model development is based on intensive background research accompanied by detailed understanding of the project's varied landforms, environmental characteristics, and relevant precontact historic contexts. New predictive models used in state and federal reviews must be approved by the Vermont Advisory Council on Historic Preservation in accordance with the *Vermont Historic Preservation Act Rule 2* (see **Appendix A** and Section **3.1.1.**).

The Phase IA investigation results in a "stand alone" report at the study's conclusion that meets the requirements of a Phase I investigation report. The VTSHPO Report Documentation database form shall be completed and submitted electronically upon completion of a Phase IA report (see **Appendix K**).

7.5. PHASE II INVESTIGATION: EVALUATION STUDY

Goals for Phase II Investigation are:

- Conclusively establish whether or not a site meets the criteria for inclusion in the National Register, if not known at the conclusion of Phase I.
- Meet the objectives of the Research Design.

The Phase I core requirements described in Section **7.3.** serve as the core requirements for the Phase II investigation. The following are supplementary requirements for Phase II.

7.5.1. PUBLIC EDUCATION AND OUTREACH

The VTSHPO expects significant public education and outreach efforts after Phase II if the site is determined to be important. Depending on the results of the study, scale of the project, the character of the site, extent of interested publics, project sponsor, and other considerations, public education may also be appropriate during the field investigation, and not only afterwards. See extensive discussion under Section **9.0**.

7.5.2. COLLECTIONS CARE AND MANAGEMENT

This phase of investigation is expected to collect more cultural materials, data, and records than Phase I. Accordingly, provisions should be made early on for the various decisions that must be made about collections care and disposition during investigations and analyses. See extensive discussion under Section **10.0**.

7.5.3. RESEARCH DESIGN REQUIREMENTS FOR PHASE II

Phase II investigation may be necessary to gather additional information about a site's characteristics, site significance, and the project's potential impacts to the site. The goals of the Phase II investigation are to gather additional, more detailed, information on a site's character, integrity, condition, size and boundaries, stratigraphy, structure, function, and context(s) sufficient to evaluate its significance, or to establish its lack of significance. If not previously determined, this phase of investigation will conclusively determine whether or not the site meets the National Register criteria.

Field investigations at an historic period archeological site should not be conducted until thorough background research from traditional historic sources, including oral history, has been completed. In fact, the VTSHPO encourages thorough background research prior to developing the final Research Design for the field investigation component of the study. Historic research is essential for framing important research questions, understanding data categories that may be present, designing appropriate methodologies to recover those data, and understanding potential site significance. If appropriate, the background research and the field investigation can be developed as two separate Research Designs, the latter depending on the results of the background research.

The Phase II Research Design should:

- a. Meet the Research Design Standards (see Section **7.1.1**).
- b. Include the Phase I Research Design requirements (see Section **7.3.1**).
- c. Include the following:
 - Provide a detailed discussion of project objectives, research topics and research questions, and expected results. Research topics and questions must address and refine priority research topics and associated historic contexts in the Vermont Historic Preservation Plan or other relevant source of information.
 - Provide a detailed discussion of the proposed background research needed to obtain comparative information on potentially relevant site types, data categories, and necessary local and regional contexts.

- If archeological field investigations are warranted, describe and justify the sampling strategy, field methods, and intensity of investigation at each site to be investigated based on the site type, expected data categories, project and research objectives, and research questions.
- Discuss the care and management for the recovered archeological collections, including field notes, other records, artifacts, and other data categories to be recovered. Discuss how large volumes of redundant data, such as construction materials at a historic site, will be treated. Discuss potential discard options for expected categories of artifacts or other data types (see Section **10.0.**).

7.5.4. BACKGROUND RESEARCH

Using local and regional frameworks, conduct sufficient detailed background research to become very familiar with comparable site types, artifactual materials, and other data classes. Thorough background research also includes detailed review of primary and secondary sources and pictorial information of various kinds, such as photos, drawings, and maps, among other sources of information. Oral histories are also important.

7.5.5. HISTORIC CONTEXTS

Phase II investigations on significant sites should result in the development of new historic context(s) for the site type(s) under study, or, must refine existing contexts. Clarifying and describing National Register registration requirements for the property type being investigated is encouraged in the study report.

7.5.6. FIELD INVESTIGATIONS AND DATA ANALYSES

Field methods should be chosen and implemented to satisfactorily meet the Phase II objectives. These may include, but are not limited to, additional shovel test pits at reduced intervals, block excavations around features and artifact concentrations, deep testing, remote sensing studies, and so forth. Recovered data will be analyzed and interpreted using appropriate techniques and theoretical frameworks for the purpose of addressing the research questions. Analyses of data recovered during the Phase I study will be integrated into the Phase II analyses, findings, methodological assessment, and interpretation of findings. Additional analyses, or even re-analysis, of some or all of the Phase I data may be necessary at this level of study.

For precontact archeological sites, radiocarbon (C14) dates should be obtained whenever possible at this phase of investigation. In all cases in which precontact sites are being studied, Phase II budgets must include costs for radiocarbon dates in anticipation that suitable dating material will be recovered.

7.5.7. DOCUMENTING RESULTS

7.5.7.1. SPECIAL CONSIDERATIONS FOR PHASE II END OF FIELD LETTER

The End of Field Letter must include a strong statement of site significance, or lack of significance, based on available evidence, research, analyses, and interpretations at the conclusion of the field work. Comparable Vermont, and if appropriate regional, examples of similar, investigated site types to support the site's significance should be discussed; or an explanation provided if no similar sites exist. For precontact sites, the matrix in Section **4.4.** must be incorporated into the discussion and document. For historic period sites, the End of Field Letter must include the information outlined in Section **4.5.5.**

Since management (including final design or construction) decisions are often based on the End of Field letter, it should include detailed recommendations for alternative treatments for the site if National Register eligible. Alternatively, if all or parts of the site can be avoided and protected with no need for data recovery, then detailed recommendations for site avoidance and preservation before and during construction to ensure that the site is not inadvertently impacted. Such recommendations may include but are not limited to: temporary or permanent fencing to protect the site zone, special plantings and landscape considerations, special construction specifications, pre-construction on-site meetings with contractors and sub-contractors, permanent conservation easements, and so forth.

The End of Field Letter must include detailed maps (drafts and preliminary with hand annotations are acceptable) that clarify results and recommendations.

A revised Vermont Archeological Inventory form that updates information about site significance and other relevant fields should be submitted in the appropriate paper or electronic format.

7.5.7.2. PHASE II INVESTIGATION REPORT

Basic requirements for documenting Phase II investigations are set forth in the *Secretary of the Interior's Standards and Guidelines for Evaluation* (see http://www.cr.nps.gov/local-law/arch_stnds_0.htm). The following requirements supplement the federal guidance.

In some cases when the investigated site produces little additional information **and** a thorough Phase I investigation report has already been completed or in process, the VTSHPO will accept an Addendum to the Phase I report that summarizes the Phase II investigation. Such Addendum shall include necessary and relevant Phase II information, including, but not limited to, detailed description of methods, results and how they compared to the Research Design, conclusions, recommendations, and detailed maps. The VTSHPO must approve preparation of a Phase II Addendum to a Phase I report.

The Phase II investigation report should compare the data recovered during Phase II with that recovered during Phase I for the purpose of clarifying what the site “looks like” at different phases of study. The VTSHPO is interested in knowing how decreased sampling intervals, larger testing units, or different testing methodologies improve our understanding of a site and our ability to interpret it.

If requested, the VTSHPO may review Draft reports for Phase II studies. In some cases, the VTSHPO may require that a Draft copy be submitted for review and comment.

An outline and schedule for report writing must be presented in the Scope of Work and should be adhered to unless there are justifiable reasons why that schedule cannot be met. In general, the VTSHPO expects that the project report will be completed within six (6) months of the field work. Any changes in anticipated schedule should be submitted to the project sponsor and VTSHPO at least 30 days before the report is due.

Phase II investigation reports shall meet the core requirements for Phase I reports and the supplementary requirements for Phase II reports provided in **Appendix H**.

The VTSHPO Report Documentation database form shall be completed and submitted electronically upon completion of the Phase II report (see **Appendix K**).

7.5.8. NATIONAL REGISTER NOMINATIONS

If the study is being carried out in compliance with federal law, the VTSHPO may require that a completed National Register nomination be submitted at the completion of Phase II if a site is determined to meet the National Register criteria.

7.5.9. LONG TERM SITE PRESERVATION THROUGH EASEMENTS OR FEE SIMPLE PURCHASE

Conservation easements are important tools to ensure long term site protection for significant sites that can be wholly or partially preserved in-place. The project’s consulting archeologist should recommend a conservation easement for specific sites both to the VTSHPO and to the project sponsor wherever appropriate. The recommendation can be made in the End of Field Letter or in the Management Summary of the investigation report for Phase I or Phase II. Conservation easements may be stipulated in an Act 250 permit, or as a condition in a Memorandum of Agreement under Section 106, or may be a voluntary action by the landowner. In the latter case, the landowner may donate, or sell the development rights to, the land that contains the site to a non-profit organization, for example, the Vermont Land Trust or a local land trust or other non-profit. Fee simple purchase of the site by a non-profit is another option that ensures maximum site protection. Recommendations for an easement on the site should be supported by a site map showing the area meriting protection in perpetuity. Detailed information on conservation of sites through easements (either through purchase or donation) is available at <http://www.vlt.org/publications.html>. The Archeological Conservancy specializes in the conservation of important sites through fee simple purchase

(<http://www.americanarchaeology.com/aaaquis.html>), although local and regional non-profits may also be interested partners.

7.5.10. SITE MONITORING

When appropriate, the project's consulting archeologist should recommend monitoring of significant sites during construction to the VTSHPO and to the project sponsor. The recommendation can be made in the End of Field Letter or in the Management Summary of the Phase II investigation report. Site monitoring may be stipulated in an Act 250 permit, or as conditions in a Memorandum of Agreement or No Adverse Effect Letter under Section 106.

7.6. PHASE III INVESTIGATION: DATA RECOVERY STUDY

The VTSHPO uses the Advisory Council on Historic Preservation's *Recommended Approach for Consultation on Recovery of Significant Information from Archeological Sites* (see **Appendix G**) for guidance on data recovery investigations in both federal and state projects.

Goals for Phase III Investigation are:

- Recover the maximum significant cultural, environmental, methodological and interpretive information and values from the site before the site is destroyed in whole or in part.
- Meet the objectives of the Research Design.
 - Provide a high level of public education and outreach to ensure that the proposed destruction of the site provides maximum benefits to a wide audience.

The Guidelines for Phase I and II Investigations set out the core requirements for Phase III investigation. The following are supplementary requirements for Phase III. The Phase I and II investigations establish both the foundation and framework for this last, most intensive, and intrusive level of archeological study.

7.6.1. PUBLIC EDUCATION AND OUTREACH

The highest level of public education and outreach is required in the course of Phase III investigations to ensure that the proposed destruction of a site provides maximum benefits to a wide audience. Community involvement at different levels is essential. Education and outreach programs must include both short-term programs during the investigations and long-term or permanent programs and/or projects with extended public benefits. (see Section **9.0.**).

7.6.2. COLLECTIONS CARE AND MANAGEMENT

This phase of investigation is data intensive and gathers a great deal of cultural materials, data, and records. Provisions should thus be made early on for the various decisions that must be made about collections care and disposition during and after investigations and analyses. See extensive discussion under Section **10.0.**

7.6.3. RESEARCH DESIGN REQUIREMENTS FOR PHASE III

The Phase III Research Design should:

- a. Meet the Research Design Standards (see Section **7.1.1.**).
- b. Include the appropriate Phase I and Phase II Research Design requirements.
- c. Provide a detailed discussion of the research topics and questions to be addressed.
- d. Discuss the types of data that must be gathered in order to address these topics and questions.
- e. Discuss strategies and methods for recovering the needed data.
- f. Discuss methods of analyses and interpretation.
- g. Identify interdisciplinary experts who may participate in the study.

Depending on the nature and scale of the project and proposed archeological results and methods, the VTSHPO may recommend peer review of the Research Design.

7.6.4. PHASE III SCOPE OF WORK

The Phase III Scope of Work shall meet the general requirements of Section **7. 2.** and shall describe:

- a. Anticipated report format (s), content, number of copies, and public distribution plan.
- b. Proposed public education and outreach programs and publications.
- c. All personnel and interdisciplinary experts who will participate in the investigation.
- d. Detailed schedule for carrying out all aspects of the study.
- e. Detailed budget.

7.6.5. DOCUMENTING RESULTS

7.6.5.1. SPECIAL CONSIDERATIONS FOR PHASE III END OF FIELD LETTERS

- a. Identify and describe any portion of the site that:
 - was **not** subject to data recovery; or
 - continues to contain significant information subsequent to data recovery; and
 - lies outside of the project limits.
- b. Recommend measures to be taken by the project sponsor to protect such parts of the site during construction if destruction of those portions of the site is avoidable.
- c. Provide recommendations for site monitoring, depending on the timing of the End of Field Letter in relation to project construction.
- d. Provide revised Vermont Archeological Inventory form in appropriate format (paper or electronic) that updates information about site significance and other relevant fields.

7.6.5.2. QUARTERLY REPORTS

Brief summary reports shall be submitted quarterly to VTSHPO and the project sponsor and, if appropriate, to the community, and other relevant parties. Quarterly reports shall include, but not be limited to, the following information: summary of data analysis and interpretation tasks completed in the quarter, summary (or examples) of interesting or new findings, status of current public education and outreach efforts; and scheduling concerns, if any.

7.6.5.3. PHASE III INVESTIGATION REPORTS

Phase III reports contain new and important information and should be available to as many scholars and interested individuals as possible. This is especially important since the site or sites investigated will be wholly or partly destroyed. The VTSHPO, the project sponsor, and consulting archeologist will discuss and negotiate the format(s) of the final report, number of copies required, and methods for report distribution. The project sponsor is responsible for distributing the reports to the community, consulting parties, interested persons and organizations, colleagues, and public libraries. The VTSHPO can assist by recommending a report distribution list. A minimum of 5 final reports must be submitted to the VTSHPO. At this level of study in which a site is destroyed, VTSHPO may recommend that the project sponsor publish the report to ensure maximum distribution of the information. Digital publishing on the web may be a useful, complementary new tool to disseminate the results of these studies to the broadest public (see Section 9.0.). Making copies of the report available on CD Rom is an appropriate substitute for printing hard copies of the report.

The Phase III investigation report should compare the data recovered during Phase I and II with that recovered during Phase III for the purpose of clarifying what the site “looks like” at different phases of study. The VTSHPO is interested in knowing how decreased sampling intervals, larger testing units, or different testing methodologies improve our understanding of a site and our ability to interpret it.

If requested, the VTSHPO may review Draft Phase III reports. In some cases, the VTSHPO may require that a Draft copy be submitted for review and comment.

The VTSHPO Report Documentation database form shall be completed and submitted electronically upon completion of the Phase III report (see **Appendix K**).

7.6.5.3.1. STANDARDS FOR PHASE III REPORTS

1. The format of the Phase III report will be discussed with VTSHPO and the project sponsor and agreed to when the Scope of Work is developed.
2. The report will be special in content, design, and format. For example, different specialists may author separate chapters on general overviews, on specific research topics and questions, on specific data categories, on specific methodological experiments and innovations, etc.

7.6.5.3.2. SPECIAL CONSIDERATIONS FOR PHASE III REPORTS

1. Provisions for a non-technical editor may be desirable and should be considered when developing the Phase III Scope of Work and budget.
2. Electronic publishing may be considered as an alternative, or supplement, to the standard technical report. A Digital Imprint template developed by the University of California at Los Angeles Digital Lab is available free to archeologists. The template facilitates digital publishing incorporating integrated text, databases, photos, and video for display on a web site. This publishing technology has the potential for more rapidly distributing archeological information in an exciting format to a very broad audience. Digital publishing allows the reader to rapidly switch from text to color photos to video to databases with the touch of the mouse. For an overview of the Digital Imprint template, and a link for downloading a free copy, see www.ioa.ucla.edu/dit.html.
3. Distributing reports in CD Rom format should be considered whenever possible.

Basic requirements for documenting Phase III investigations are set forth in the *Secretary of the Interior's Standards and Guidelines for Archeological Documentation* (see http://www.cr.nps.gov/local-law/arch_stnds_0.htm). The following requirements supplement the federal guidance.

1. Management Summary and Recommendations

- a. Briefly identify and describe any portion of the site that was not subject to data recovery; or continues to contain significant information subsequent to data recovery; and lies outside of the project limits. Recommend measures to be taken by the project sponsor to protect such parts of the site during construction if destruction of those portions of the site is avoidable.
- b. Provide any appropriate recommendations for monitoring of site(s), depending on the timing of the report in relation to project construction.
- c. Provide suggestions for long term measures to ensure preservation of the site in perpetuity.

2. Conclusions

- a. Discuss contributions that this investigation has made to state, regional or national precontact or postcontact history.
- b. Revise and refine the relevant historic context(s) and current information on the ideal characteristics of this type (s) of archeological site (s).
- c. Provide recommendations for updating or revising research questions, goals and priorities in the Vermont Historic Preservation Plan.
- d. Discuss any on-going or proposed preservation efforts or programs related to site protection, structures documentation, special studies or analyses, site stabilization, etc.

3. Education and Outreach

Describe and discuss the public outreach programs resulting from the study, including benefits, number of people who actively participated in such efforts, and issues and how they were

resolved; and identify long term, in progress, and/or yet to be completed education and outreach programs.

4. Appendices

- a. Technical appendices should be formatted and bound into a separate volume so that it can be distributed only to those that may be interested in the supporting data such as soil profiles, computer print-outs of catalog forms, etc. Soil profiles should be provided for all test units or for a representative sample, depending on the number excavated and the variation encountered.
- b. Any ancillary studies such as geomorphological reports, special analyses, etc., should be included in the main report volume if they are of broad interest.
- c. A copy of the Research Design, Memorandum of Agreement, and any other relevant project correspondence should be included in the technical appendix volume.

7.7. LONG TERM SITE PRESERVATION THROUGH EASEMENTS OR FEE SIMPLE PURCHASE

As discussed in more detail in Section **7.5.9.**, conservation easements are important tools to ensure long term site protection for significant sites that can be wholly or partially preserved in-place. Where appropriate, the project's consulting archeologist should recommend a conservation easement for specific sites in the Management Summary of the Phase III End of Field Letter or investigation report. Recommendations for an easement on the site should be supported by a site map showing the area meriting protection in perpetuity. In some cases to ensure maximum site protection, fee simple purchase of the site by a non-profit may be desirable. The VTSHPO can help facilitate contact with non-profit organizations who may be interested in the conservation of the site.

7.8. SITE MONITORING

When appropriate, the project's consulting archeologist should recommend monitoring of significant sites during construction to the VTSHPO and to the project sponsor. The recommendation can be made in the End of Field Letter or in the Management Summary of the Phase III investigation report (if completed prior to construction). Site monitoring may be stipulated in an Act 250 permit, or as conditions in a Memorandum of Agreement or No Adverse Effect Letter under Section 106.

8.0. ADDITIONAL DOCUMENTATION

8.1. REPORT DATABASE FORM

A completed report database form must be submitted both electronically and in hard copy to VTSHPO upon completion of any investigation report, including the Alternative Format (see **Appendix K**).

8.2. VERMONT ARCHEOLOGICAL INVENTORY FORM

8.2.1. COMPLETING VERMONT ARCHEOLOGICAL INVENTORY FORMS

A Vermont Archeological Inventory (VAI) form in electronic format must be completed for any previously unrecorded site. Non-significant sites should be minimally recorded. Sites that have been completely destroyed will not be assigned VAI site numbers but should be reported in the ARA or Phase I report.

Common sense should prevail when determining whether or not to seek a VAI number and complete a site form. For example, a form does not need to be completed for a location shown on an historic map for which there are no visible remains on the surface and in which no cultural materials associated with that site are recovered. As another example, the find area for sheet scatter that lacks a significant association with a nearby site will not be assigned a VAI. Designating a cluster of related sites as an “archeological district,” either precontact or historic period, and assigning a single site number to the district may be appropriate in some cases and shortens completion of the inventory form.

Updated electronic VAI forms for sites with existing VAI documentation should be submitted when additional information is obtained during the ARA, Phase I, II or III investigations.

Completed forms must be submitted with the ARA Letter Report (if there’s a visible site and the assessment is likely to conclude at that time), or, with the Phase I End-of Field Letter. Revised VAI forms with updated information must be submitted at the completion of Phase II and III studies.

The VTSHPO will update users of any changes to formats as they arise. **Appendix I** contains the most up-to-date VAI form.

8.2.2. NAMING POTENTIALLY SIGNIFICANT SITES

As site investigations progress from Phase I to Phase II and sometimes to Phase III, it is helpful in technical reports, non-technical publications, and web sites to refer to sites by name, instead of their VAI numbers. It makes for more “reader friendly” text.

9.0. PUBLIC EDUCATION & OUTREACH

Archeological studies carried out in Vermont need to interpret project results for the public benefit and present those findings to the public. The expected level of education and outreach increases for each successive phase of investigation and depends on project scale, investigation results, project sponsor, and anticipated affects to one or multiple sites. Archeological consultants are encouraged to adopt new and innovative methods as well as those that are described below.

Public education supplements data recovery as mitigation for the destruction of all or part of a significant archeological site. The extent of public education and outreach efforts needed to achieve mitigation is based on the extent of the loss of archeological information and the site's importance. Sections **9.1.** through **9.4.** are intended to provide guidance to consultants who generally must take the "lead" role in all aspects of education and outreach.

9.1. STANDARDS FOR PUBLIC EDUCATION AND OUTREACH

- Landowners, towns (both local government and community groups), educators, students, and the general public are likely targets for education and outreach.
- To the greatest extent possible, education and outreach projects and programs should be conducted in consultation with the local community and other interested parties both during planning and implementation.
- Education and outreach activities should be coordinated with Native Americans as appropriate.
- Exceptional sites or special projects may require enhanced education and outreach as a component of the Phase I investigation.
- Historic archeological sites may be suited to different types of education and outreach efforts than precontact sites.

9.2. EDUCATION & OUTREACH FOR LANDOWNERS

- Site information will be provided to the landowner of a site being investigated as it becomes available (including, for example, End of Field Letter, site maps, investigation site reports, non-technical publications, etc.).
- As appropriate, stewardship information can be provided to landowners to promote long term voluntary site conservation. This may include information on The Archeological Conservancy (www.americanarcheology.com), Vermont Land Trust (www.vlt.org), local conservation non-profits, and on other tools and techniques to voluntarily preserve site in perpetuity. Stewardship information on these organizations is available from the VTSHPO or directly through the organizations.
- A public meeting for site landowners and other interested persons may be appropriate depending on the results of the study.

9.3. EDUCATION & OUTREACH FOR THE TOWN

- Local governments, historic preservation commissions, and Certified Local Government commissions (CLG), where they exist (http://grants.cr.nps.gov/CLGs/CLG_Search.cfm), as appropriate, should be made aware of the archeological investigation; project location, anticipated schedule, site tour information; etc. This can be accomplished through written notification, although attending select board, planning commission, conservation commission, and historic preservation or CLG commission meetings can be very helpful, especially on large projects and during Phase II and III investigations.
- At the conclusion of the archeological study, site information should be provided to the Town dependent on the project sponsor's approval. Information may include site maps, GIS data sets, and investigation report.
- A presentation to the Select Board, Planning Commission, historic preservation commission, CLG commission, and /or Regional Planning Commission may be appropriate depending on the results of the investigation.

9.4. RECOMMENDED PROJECTS AND PROGRAMS

The following list illustrates some examples of recommended education and outreach projects. Some of these examples incorporate recent advances in technology. The VTSHPO requires that it be consulted during development of scopes of work for Phase II and III education and outreach programs. The VTSHPO can provide guidance and information on a variety of topics, for example, on available exhibit designers and video and digital production firms, interesting web sites that may provide useful ideas, and samples of excellent non-technical publications from Vermont and other states.

- Develop and maintain archeological information on a web site
- Exhibits (temporary/traveling/or permanent)
- Illustrated Lectures
- Non-technical books
- *Vermont Life* magazine article or news bulletin
- Articles in other popular local, regional, or national magazines
- Videos
- Press releases
- Community archeology projects using adult and youth volunteers or students (examples: field schools, summer camps)
- Education Curricula
- TV and radio programs
- Presentation (power point) – can later be put on web site
- CD Rom
- Virtual archeology (interactive exhibits, educational games, Tours; other programs and site interpretation) on the web or CD Rom (see www.learningsites.com/)



- Digital publication on web
(see Section **7.6.5.3.2.**)
- Interpretive signage
- Site tours
- Site brochures

10.0. CARE AND MANAGEMENT OF ARCHEOLOGICAL COLLECTIONS

Archeological collections include artifacts, soils and feature samples, floral and faunal data, records, reports, photographs, and other sets of data recovered from an archeological site, that contribute to the significance of a site, and that are determined to require collections care.

Archeological artifacts, materials, documents, and other data assembled during archeological investigations should, to the greatest extent possible, be accessible in perpetuity for research, education, and public interpretation. Since even careful, professional archeological excavation of sites is a destructive process, the recovered information is all that remains to tell the story once the site, or parts of the site, is destroyed. Care and management of collections to allow future research, education, and public interpretation is thus a key part of any archeological investigation.

Federal agencies who own land or who fund, permit, license, or otherwise provide assistance to projects are guided by Federal law, regulations and guidelines in their obligation to care and manage collections (specifically, 36 CFR 800, the ***Secretary of the Interior's Standards and Guidelines for Archeological Documentation***, the ***Archeological Resources Protection Act***, and 36 CFR 79).

State agencies that own land or sponsor archeological investigations on their lands are guided by Title 22 of ***Vermont Statutes Annotated***, Chapter 14 (especially sections 762 and 764) (see <http://www.leg.state.vt.us/statutes/title22/title22.htm>). Section 762 of 22 VSA 14 states that “*all information and objects deriving from state lands shall remain the property of the state and be utilized for scientific or public educational purposes.*” Section 764 of 22 VSA 14 requires that:

all specimens so collected under permit shall be the permanent property of the state and that the state archeologist shall make prior arrangements for the disposition of specimens derived from the activities in a appropriate institution of the state or for the loan of the specimens to qualified institutions in or out of the state.

Federal agencies generally impose their obligations for care and management of collections on recipients of federal funds or licenses through contract, Memoranda of Agreement, Programmatic Agreement, or other understanding.

Archeologists must carefully weigh decisions about which artifacts or data sets to keep since caring and managing for collections in perpetuity involves significant costs, commitments, and efforts. The National Park Service offers excellent guidance and information for dealing with many of the complex topics associated with care and management of collections at their web site <http://www.cr.nps.gov/aad/curation.htm>.

Generally, all cultural materials recovered from a precontact site are considered important and worthy of care and management in perpetuity. However, data classes such as fire cracked rock from fire pits, hearth or other feature fill, soil samples, and some other kinds of data should be

judiciously evaluated to assess whether it is necessary to keep all or part of it after analysis. The type of site involved will affect these considerations. Retaining collections from precontact site contexts is especially important when an investigation ends after Phase I since it may not be possible to know what the collected set of data represents.

Artifacts and other data classes from historic period archeological sites require more deliberation and decision-making about what to keep after analysis. Generally, the earlier, or rarer, or otherwise more special the historic archeological site, the more materials should be retained if they pertain to the site's period of significance. Even for early historic sites, disposition of large quantities of brick, glass, rock, and other construction materials needs to be carefully considered; only appropriate samples should be maintained. For more common types of historic period archeological sites, the most important parts of the collection are those data sets that addressed the research questions. Twentieth century artifacts such as tin cans, bottles, bottle caps, and so forth, in 19th century contexts should not be retained although documenting their archeological context may be necessary or even important. Occasionally, however, it is crucial to retain an out-of-context artifact as confirmation of site disturbance or site age or because it offers another important piece of information.

10.1. IF A SITE IS LOCATED ON PRIVATE LAND

All archeological materials collected from private land in the course of archeological investigations are the property of the landowner unless they are explicitly donated to a suitable organization that will care for and manage the collections. It is important that consulting archeologists inform the landowner of their legal entitlement to the archeological materials. If the landowner so desires, some or all of the material must be returned to the landowner after data analyses. Thorough documentation and analysis should be afforded important aspects of any data set that are to be returned to a landowner since they may not be accessible to researchers again. Consulting archeologists should always ask the landowner to donate the collections to ensure perpetual access for future research, education, and public interpretation. Since there is no existing state collections care facility at this time, identifying the organization to whom the collection should be donated is difficult. For the interim, the VTSHPO asks that the consulting archeologist temporarily care for the donated collection until a suitable public facility is established.

If the archeological investigation on privately owned land is federally or state funded, and if the landowner relinquishes ownership of the collection, then that federal agency (or designee) or state agency is responsible for ensuring the care and management of the collection in perpetuity in accordance with federal laws, regulations, and guidelines or under Title 22 of *Vermont Statutes Annotated*, Chapter 14.

Donation of a data collection from privately owned land **must** be documented by letter of agreement or other appropriate document between the landowner and interim or permanent caretaker of the collection. Samples of Letters of Transfer and Deed of Gift are found in **Appendix M**.

Donating an archeological collection and any associated care fee may have potential tax benefits for a landowner. Private developers may wish to consult a tax lawyer or accountant on this possibility.

10.2. IF A SITE IS LOCATED ON PUBLIC LAND

All archeological materials collected from federal or state lands or under state waters in Vermont are the property of that public entity and entrusted to it. Thus, the land-owning or controlling federal agency (or designee) or state agency is responsible for ensuring the care and management of all collections recovered from their lands in perpetuity in accordance with federal laws, regulations, and guidelines or under Title 22 of *Vermont Statutes Annotated*, Chapter 14 (especially sections 762 and 764).

The State of Vermont does not currently have a designated facility for care and management of archeological collections. Although the University of Vermont (UVM) acted in that capacity for nearly 20 years, it no longer accepts collections not recovered by UVM's Consulting Archaeology Program. The VTSHPO and the Vermont Agency of Transportation are now in the process of assessing the state's needs for care and management of Vermont collections, identifying costs for assembling existing collections now distributed in Vermont and elsewhere and future costs, and examining possible facility alternatives. The VTSHPO will keep consulting archeologists, federal and state agencies, private developers, and other potential users informed about the progress being made on this critical initiative. An interim facility may be identified in the near future. Generally, university-based or large consulting organizations are temporarily storing collections at their own institution. Consulting archeologists who cannot store collections on a temporary basis should consult with the VTSHPO and their project sponsor about the interim disposition of collections.

10.3. STANDARDS FOR CARE AND MANAGEMENT OF COLLECTIONS

The National Park Service has developed standards for care of collections, detailed in 36 CFR 79. The State of Vermont expects to meet or exceed these standards when a facility is established. Any institution that permanently or temporarily cares for Vermont archeological collections should attempt to meet the federal standards. The National Park Service has an extensive web page on care and management of archeological collections at [http://www.cr.nps.gov/aad/collections/table\(frame5\).htm](http://www.cr.nps.gov/aad/collections/table(frame5).htm).

10.4. COSTS OF CARE AND MANAGEMENT OF COLLECTIONS

There are serious short and long term costs for collections care and management. The National Park Service conducted a detailed survey of costs in 1997 and found fees ranging from \$200 to \$1080 per box (or cubic foot). Accordingly, consulting archeologists should be aware of these fees and plan on charging a reasonable but realistic amount when planning for future collections care. Fees collected in expectation that a suitable statewide facility will be established should be placed in escrow to ensure that those funds can accompany the collections. (see *Archeological Curation Fees Across the United States*: <http://www.cr.nps.gov/aad/feesstud.htm>).

11.0. ACCIDENTAL DISCOVERY OF ARCHEOLOGICAL SITES AFTER PROJECTIVE REVIEW AND/OR DURING PROJECT CONSTRUCTION

This section refers to archeological sites that are discovered **after** archeological review has been completed and/or after project construction has begun. **If human remains are discovered in the course of archeological review or during project construction, see Section 12.0.**

Examples of archeological sites that may be discovered during construction include:

- Native American sites that are not anticipated by the general predictive model or sensitivity assessments.
- Human remains which are unanticipated.
- Foundations and other structural remains, such as wells, obscured by fill or later disturbances.
- Deeply buried sites in floodplains that are missed by standard testing methods.
- Historic archeological sites that are not identified on historic maps (Beers, Wallings, etc.)

11.1. PROCEDURE TO FOLLOW WHEN DISCOVERIES ARE MADE IN VERMONT AGENCY OF TRANSPORTATION PROJECTS

- Protocols for accidental site discoveries for Vermont Agency of Transportation (VAOT) projects fall under separate guidance. Contact Dr. Duncan Wilkie, VAOT Archeology Officer, immediately at (802) 828-3965.

11.2. PROCEDURE TO FOLLOW WHEN DISCOVERIES ARE MADE IN THE COURSE OF PROJECT CONSTRUCTION FOR ALL OTHER PROJECTS

- The project will stop immediately if previously unidentified archeological sites are discovered during project construction.
- If the human remains are discovered, refer to Section **12.0**.
- The project sponsor, developer, construction company, or project engineer, as appropriate, shall immediately notify the project's consulting archeologist, if there was one during project planning. If not, the VTSHPO shall be notified.
- The consulting archeologist or VTSHPO shall make a preliminary assessment of whether the site is potentially significant and recommend additional steps to mitigate effect. Depending on the project, the nature of the discovery, and the statutory jurisdiction, VTSHPO may ask the project sponsor to retain a consulting archeologist to assist in development of a treatment plan.
- Depending on the statutory jurisdiction of the project (Act 250, state law, or federal law), the appropriate jurisdictional agency may need to get involved in discussions to resolve the matter in accordance with their respective authorities.

- If the project falls under federal Section 106 jurisdiction, the process set out in 36 CFR 800.11 and 800.13 must be followed (see **Appendix A**).

11.3. TREATING AN UNANTICIPATED SITE ONCE DISCOVERED

- The VTSHPO or the project's consulting archeologist will conduct a field assessment of the site to determine whether the site is potentially State or National Register eligible and the project's potential effects.
- The project sponsor may need to hire an archeological consultant if additional information is necessary to determine significance, site boundaries, and State Register or National Register eligibility.
- If the site meets State-National Register criteria, the preferred treatment is to avoid it and protect it in place.
- Site significance and treatment options based on the nature of the site and the situation should be discussed with the appropriate interested public parties and documented.
- If site avoidance of a significant site is not possible, then archeological data recovery of the site may need to be completed if other treatment is not more appropriate.
- If the project falls under federal Section 106 jurisdiction, construction in the site area will not proceed until it has been reviewed and documented according to 36 CFR 800.11 and 800.13.
- See Section **12.0.** if burials are discovered.

12.0. TREATMENT OF HUMAN REMAINS

This section is pending. See **Appendix L** for the Advisory Council on Historic Preservation's policy statements on *Treatment of Human Remains and Grave Goods* (1988), intended for guidance on federal lands or in Section 106 and Section 110 regulatory contexts.

13.0. CAPPING SITES WITH FILL

In certain circumstances, it may be appropriate to cap a site with fill to permit certain uses of the site area and/or to protect the site. The VTSHPO will not consider capping a site an adverse effect if the following two conditions are met:

- a. The cap material is potentially removable and does not forever bury the site.

Some examples when capping may be considered (other examples may be appropriate):

- 1' of fill over a site to construct a gravel access road or fire road;
- 4' of fill over a site to permit bike path construction

Examples when capping will not be considered:

- burying a site under a permanent, trafficked road such as a new highway.
- burying a site under a permanent building built on slab

In these examples, the site is “forever” inaccessible for research and its characteristics may be disturbed in unknown ways from vibrations, weight, chemicals, road salt, etc.

- b. There have been sufficient site investigations to determine the feasibility of capping and to gather sufficient data to ensure appropriate capping that will not adversely affect the site. This will require a Phase I investigation at the minimum and, depending on the circumstances, may require Phase II investigations as well.